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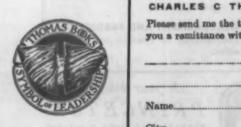
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EDITORIAL NOTE

Errata. The volume number was given incorrectly in entries 500, 505, 537, 559, and 607 in the February issue of Vol. 24. The corrected bibliographic information is Rev. franç. Psychanal., 1948, 12.

GENERAL

2889. Meerloo, A. M. Delusion and massdelusion. Nerv. ment. dis. Monogr., 1949, No. 79, xi, 126 p.—Part I of this monograph constituting a paper entitled Delusion and mass delusion; an essay on the capricious thinking in man and collectivity, offers an analysis of how men came to accept "their fictions, their chaotic notions and ideas" and discusses the nature and method of formation of public opinion. Part II, Mass Suicide and Atomic Fear, shows how the "atomic war of nerves," which evokes fear and speculation, actually stimulates an accumulation of emotions that may be discharged in renewed aggression. Part III, Some Mental Aspects of the Human Animal, relates man's upright posture and his long youth to his search for truth, his persistence as a student; is an inquisitive animal who learns by playing .- N. H. Pronko.

2890. Romano, John. [Ed.] (U. Rochester, N. Y.) Adaptation. Ithaca, N. Y.: Cornell University Press, 1949. xiv, 113 p. \$2.00.—The 5 papers presented at the dedication of a psychiatric wing of Strong Memorial Hospital included in this volume have as their central theme "adaptation." The contributions are by a biologist (24: 2974), a physiologist (24: 2971), a psychologist (24: 2968), a psychiatrist (24: 3255) and an anthropologist (24: 3150).—C. M. Louttit.

THEORY & SYSTEMS

2891. Birnbaum, Ferdinand. Gibt es eine Konvergenz der tiefenpsychologischen Lehrmeinungen? (Is there a convergence of the teachings of the depth psychologies?) Int. Z. Indiv.-Psychol., 1948, 17, 156-171.—7 conceptions of convergence are discussed. The various psychological schools can be classified on the basis of five therapeutic methods; substitutive, cathartic, analytic, anagogic, and institutive. While emphasizing one, any psychotherapy utilizes all other methods. The basic teachings by Freud, Adler, and Jung also differ in their emphasis, but converge in the "anthropological psychology" that "man must guide his life according to his own formula."—C. T. Bever.

2892. Felber, Stanislav. Vedomie a podvedomie. (Consciousness and subconsciousness.) Bratislava: Slovenská Akadémia Vied a Umení, 1948. 126 p.—In this materialistic attack on psychoanalysis, the

author states that all mental phenomena are physiological processes in the nervous system; the physiological processes that are not mental are indeed unconscious, but as such they have no place in psychological studies. The existence of subconscious phenomena, on the other hand, is recog-nized, as established by impulses arising in the nervous system itself and influencing the trends of consciousness. The nature of the human mind is determined, first, by hereditary factors, including curiosity and imitation; second, by conditioned reflexes, particularly those acquired in early childhood, which form an individual system underlying one's personality; and third, by conditions of one's environment, both physical and social. Actual conscious experiences are a synthesis of processes originating in the external world and of processes originating in a personal system of conditioned reflexes. The two sources of experience, outer and inner, are dialectically related, insofar as the conditioning itself is in its origin environmentally determined, particularly through education, economic life, and traditions of society. The task of education is to provide opportunities to avoid accidental accumulation of conditioned reflexes and to offer instead those which, in the resulting synthesis, would be as free from internal conflicts as possible.-R. B. Winn.

2893. Fischl, Paul. Weiterentwicklung oder Revision? (Progress or retrogression?) Int. Z. Indiv. Psychol., 1948, 17, 172-177.—Leonhard Deutsch's Critical Contemplations (see 23: 5835) appears to the author a reversion to the naturalism of psychoanalysis from which "Alfred Adler rebelled." The rebuttal is based on considerations of causality, human goals, and life plan. Deutsch is held to overemphasize "man as creation" to "man as creator." The author points to the further development of pedagogy and psychotherapy as progress. "And finally, strange as it may sound, individual psychology does not yet have a psychology." The author feels this should be developed.—C. T. Bever.

2894. Freud, Sigmund. The future of an illusion. New York: Liveright, 1949. (International psychoanalytical library, no. 15.) v, 98 p. \$2.50.—A reprinting of this title (see 2: 3116) which has long been out of print.

2895. Gerard, R. W. (U. Chicago, Ill.) Physiology and psychiatry. Amer. J. Psychiat., 1949, 106, 161-173.—Our knowledge, to date, of psychic phenomena and neural processes has been fain to make the neurological explication of all behavior a matter of faith rather than of proof. The mind-body problem, psychoanalysis as a science, the problems of mind and behavior are discussed. A

semi-historic review of the salient developments concerning our understanding of neurophysiological mechanisms reveals our major accomplishments: a completely new microphysiology of the nervous system and the discovery of a dynamic macrophysiology. In closing, the author points out the role psychiatry must play upon the utilization of science for human welfare.—D. E. Walton.

2896. Hofstätter, Peter R. (U. Gras, Austria.) Einführung in die Tiefenpsychologie. (Introduction to depth psychology.) Vienna: Wilhelm Braumüller, 1949. viii, 331 p. \$3.50.—Three sections (dynamics and development of personality, life conflicts, and psychotherapy) trace the historical growth of conscious-unconscious concepts, methods of proof in depth-psychology, the relationships of general and depth psychology. The author's goal is to contribute to the gradually developing synthesis of the several schools of depth psychology. A 90-page section is given to annotations and additions.—G. Rubin-Rabson.

Rabson.

2897. Ketchum, J. D. (U. Toronto, Can.)

Meaning, motives, and social organization. Canad.

J. Psychol., 1949, 3, 218-225.—Meaning is described as falling into two contexts, cognitive and affective.

Both uses are regarded as valid. The interrelationship of cognition and motivation is discussed as is the relationship of meaning and social organization.

I. W. Roseles, Jr.

—J. W. Bowles, Jr.

2898. London, Ivan D. (Tulane U., New Orleans, La.) The need for reorientation in psychology in the light of modern physics. J. gen. Psychol., 1949, 40, 219-228.—The implications of the new "indeterminism" in physics for psychology are discussed. It is feared that "cultural lag" will prevent psychologists from working in terms of an indeterminism which may prove a more worthwhile approach. The weaknesses involved in deterministic philosophies when applied to such pursuits as psychoanalysis and vocational guidance are pointed out. It is suggested that for "divergent" (non-lawful) man, psychology must be at once a science and a philosophy of life.—B. R. Bugelski.

2899. London, Ivan D. (Tulane U., New Orleans, La.) The role of the unneutralized symbol in psychology. J. gen. Psychol., 1949, 40, 229-245.—Psychologists have not taken into account the new physics. They function in terms of a frank, but naive, determinism. Deterministic theories bear the "stamp of some philosophy," and lead to ad hoc theories and explanations which are implemented by reliance on "unneutralized symbols," selective hind-aight, empathetic metaphors and generalized anthropomorphism. Psychologists try to measure "unneutralized symbols" such as personality, intelligence, etc. without appreciating the real values and limitations of operationism, and end up with vague concepts corresponding to no reality. Psychologists must come to terms with the "divergent" characteristics of man. 42 references.—B. R. Bugelski.

2900. Lundholm, Helge. (Duke U., Durham, N. C.) God's failure or man's folly? A challenge

to the physicalistic interpretation of man. Cambridge, Mass.: Sci-Art, 1949. 471 p. \$6.75.—Denying that man can be properly described in physicalistic terms the author hence denies God's failure in making man a nonpurposive, noninsightful, and nonforesightful entity without the ability of free creation. Accordingly, behavioristic and gestalt psychology as physicalistic are evidences of man's folly. Of the volume's 5 parts (16 chapters) the first two cover the destructive criticism of physicalistic systems. Parts 3 and 4 argue for a psychology based on man's conational or goal-seeking activity and on his power as an inventive and aesthetic creator; affection, cognition, and locomotion are described as sub-acts of conation. Man's creative power convinces the author that man is an image of God. The fifth and final part considers metaphysical questions about the relation of man to the world and to God.—J. R. Kantor.

2901. MacLeod, Robert B. (Cornell U., Ithaca, N. Y.) New psychologies of yesterday and today. Canad. J. Psychol., 1949, 3, 199-212.—Three psychologies are selected representing emphases on perception, motivation, and social attitudes in search for continuity that may eventually permit the weaving together of "psychologies" into a single pattern.—J. W. Bowles, Jr.

2902. Reeves, Margaret Pegram. The psychologies of McDougall and Adler; a comparison. Indiv. Psychol. Bull., 1949, 7, 147-161.—The approach of both McDougall and Adler is thoroughly teleological. They both tend toward a theory of psychophysical interactionism, but neither considers a pleasure-pain theory an adequate explanation of behavior. Conflicting opinions arise concerning the inheritability of acquired characters, McDougall finding evidence for it, Adler rejecting it. Adler's theory of an integrating force in personality is likened to McDougall's theory of the integrating role of the sentiment of self-regard. Physical and physiological conditions as determinants of personality are allotted more importance by McDougall. In the main there is consistent agreement regarding the nature and types of functional disorders but some disagreement in respect to dissociative disorders. 10 references.—A. R. Howard.

2903. Sjöstedt, Carl E. [Ed.] Problem i den moderna psykologien. (Problems of modern psychology). Stockholm: Natur och Kultur, 1948. 157 p.—A collection of 8 papers abstracted in entries numbered 2908, 2933, 2962, 3007, 3089, 3097, 3146, 3256.

2904. Sumner, Oswald, & Elkisch, F. B. Psychologie moderne et introspection. (Modern psychology and introspection.) Psyché, 1949, 4, 637-650.—On the basis that Jung is the only one who does not consider that all psychological phenomenon has its origin in some past event, his analytic psychology is the only school discussed in the article. Introspection, as applied to the therapeutic value of analytic psychology, is guided by a desire for finality as opposed to introspection in the other schools of

psychology, which only seek the causative factors. —G. G. Besnard.

2905. Woodruff, Asahel D. (Cornell U., Ithaca, N. Y.) The concept value theory of human behavior. J. gen. Psychol., 1949, 40, 141-154.— Factors leading to behavior are needs and ensuing drives (physiological, social, and ego), patterns of meaning, and the psychological situation. Aspects of behavior include: the evaluative, expressive, affective, and executive. The evaluative and executive aspects are primary, the expressive and affective are secondary adjuncts which include attitudes. Only the first two can be considered as causative in behavior. Behavior is considered as purposive toward restoring equilibrium or arriving at well-being, the latter state being a function of a person's concepts. The direction of behavior is a function of acquired mental content. Directive concepts have a pattern of meaning with varying degrees of emotional involvement.—B. R. Bugelski.

METHODS & APPARATUS

2906. Ferdinand, O., & Šímaně, Č. Proposition d'une nouvelle méthode pour mesurer l'intensité du son à l'audiométrie radio-électrique. (A new method for measuring the intensity of sound in electronic audiometry.) Acta oto-laryng., Stockh., 1949, 37, 315-320.—Direct sound measurement of the output of a loudspeaker that is used with an audiometer employs an auxiliary moving coil in the vicinity of the field magnet. Voltages induced in this coil, being proportional to the velocity and amplitude of loudspeaker diaphragm, give an indication of acoustic output relative to an arbitrary voltage that corresponds to a known sound intensity at a particular frequency.—I. J. Hirsh.

2907. Silkett, A. F., & Driscoll, Mae A. (U. Illinois, Navy Pier, Chicago.) Simple circuit for measuring variations in electrical resistance of a human being under emotional stress. Trans. Ill. Acad. Sci., 1949, 42, 128–129.—A simple potentiometer circuit for measuring galvanic skin resistance is described.—C. M. Louttit.

2908. Sjöstedt, C. E. Enkel apparatur för skolförsök i experimentell psykologi. (Simple apparatus for school-experimentation in experimental psychology.) In Sjöstedt, C. E., Problem i den moderna psykologien. (See 24: 2903), 126-134.—A description of materials for demonstrating the Weber-Fechner law, color contrast, sensory illusions, reaction time, and various sensory phenomena.—A. Tejler.

2909. Thurstone, L. L. Thurstone Edge Marking Card. New York: Psychological Corporation, 1949.—Card method for analysing data. Cards (\$12 per 500, \$7 per 250); manual, pp. 11 (50¢). An adjunct to the analysis of test data, the Thurstone 5 by 8 inch cards provide an economical method when the number of variables is large and the number of subjects too small to warrant punch card procedures. The manual describes the use of the cards for item

analysis, for preparing four-fold tables of attributes, and for other applications.—(Courtesy of *J. consult. Psychol.*)

(See also abstract 2944)

NEW TESTS

2910. Arthur, Grace. Arthur adaptation of the Leiter International Performance Scale. Washington, D. C.: Psychological Service Center, 1949.—Ages 4-8. Individual test. 1 form. Test material (\$55.00); carrying case (\$7.50); record cards (\$3.50 per 300); temporary manual (\$1.00), revision in preparation.—(See J. consult. Psychol., 1949, 13, 385).

2911. Brunet, Odette. Baby-tests: une échelle de développement psycho-moteur pour les enfants du premier âge. (Baby-tests: a psychomotor developmental scale for infants.) Enfance, 1948, 1, 250-255; 361-366.—In the light of existing tests of psychomotor development of infants by Lézine, Ch. Bühler, A. Gesell, and on the basis of a study by the author of a normal and representative population of Parisian babies, the author has drawn up a scale of psychomotor development for infants, consisting of 6 tests and 4 questions relating to the most characteristic behavior and acquisitions for each month of the first 15 months of life and for the 18th, 21st, 24th and 30th month of life. Each test item is indicated as whether it relates to (1) postural control; (2) adaptation, conduct towards things; (3) language; (4) personal and social reactions. In the opinion of the author the scale appears to be a quite rigorous instrument for diagnosis of development. method of calculating the developmental quotient is explained. - F. C. Sumner.

2912. Burgess, Ernest W., Cavan, Ruth S., & Havighurst, Robert J. Your activities and attitudes. Chicago: Science Research Associates, 1949.—Adults, ages 60+. 1 form. (60-90) min. Questionnaire blank (\$2.75 per 25) with manual, pp. 4, and keys.—(See J. consult. Psychol., 1949, 13, 385.)

2913. Crawford, John E., & Crawford, Dorothea M. Small Parts Dexterity Test. New York: Psychological Corporation, 1949.—High schooladult. Individual test. 1 form. Work limit, (20-30) min. Test material (\$25.00); manual, pp. 8 (35¢).—(See J. consult. Psychol., 1949, 13, 452.)

2914. Day, Dorothy. (Columbia U., New York.) Dream interpretation as a projective technique. J. consult. Psychol., 1949, 13, 416-420.—The subject is presented with ten dreams and asked to explain each one. When an interpretation is made without reference to the person having had the dream, as in this test, the interpreter is projecting his own emotions, attitudes, and experiences into the dream material.—S. G. Dulsky.

2915. Gilliland, A. R. Northwestern Intelligence Tests. Test A. Test for infants 4-12 weeks old. Boston: Houghton Mifflin, 1949.—Ages 4-12 weeks. Individual test. 1 form. Materials, 12 items, may be assembled or obtained from author. Record blank (\$2.00 per 25), with manual, pp. 15; specimen set (40¢).—(See J. consult Psychol., 1949, 13, 385.)

2916. Horrocks, John E., & Troyer, Maurice E. Tests in Human Growth and Development. Syracuse, N. Y.: Syracuse University Press, 1946 .-College and university courses in mental hygiene, etc. 4 tests, 1 form of each. (30-50) min. each. Test of knowledge of fact and principle (\$1.75 per 25); case study tests (\$2.50 per 25 each); answer sheets (\$1. per 100); manual, pp. 5 (15¢); specimen set (60¢).—(See J. consult. Psychol., 1949, 13, 453.)

2917. Hutchins, Lehman C. (Texas Technological Coll., Lubbock.) Nonmeaningful verbal structures used as projective material. J. consult. Psychol., 1949, 13, 412-415.—The test material consists of syllables, nonmeaningful words, and some meaningful words. The syllables are arranged in a series; some of the syllables appear individually, others are combined. The subject is instructed to read the words and then tell a story. It is suggested that the interpretation and analysis could follow the same method used by the Picture Story Test or the TAT. -S. G. Dulsky.

2918. International Psychological Service Center. The FR-CR Test with quantitative scores and a qualitative check list for clinical use in the evaluation of brain injury. Psychol. Serv. Center J., 1949, 1, 52-61.—The Free Recall—Controlled Recall Test (FR-CR Test) consists of a paragraph which is read to brain injured cases. Provision is made for the recording of the patient's spontaneous responses during a free recall period as well as his later answers to seven questions asked by the examiner during a controlled recall period. Instructions for administering and scoring the Test are included as well as a discussion of the development of the norms and the uses and limitations of the Test. A facsimile of the Test Record Sheet is reproduced.—H. Feifel.

2919. Komisar, David D. (Champlain Coll, Plattsburg, N. Y.) A marriage problem story completion test. J. consult. Psychol., 1949, 13, 403-406.—The Marriage Problems Story Completion Test is designed to aid the counselor in understanding the personality facets of his client as they relate to his attitudes toward marriage. The test consists of five cards, each with a brief summary of a problem facing a married couple. The subject is instructed to create a dialogue between husband and wife and to supply an ending to the story.-S. G. Dulsky.

2920. Leiter, Russell Graydon. (V. A., Washington, D. C.) The Leiter adaptation of Arthur's Stencil Design Test. Psychol. Serv. Center J., 1949, 1, 62-68.—Instructions for administering and scoring the Leiter Adaptation of Arthur's Stencil Design Test are discussed as well as the development of the Test norms. A table for converting the scores to mental ages and intelligence quotients is included. The author feels that the Test has a higher dis-criminative value for the IQ range 65 to 110 than it has for the IQ range 110 to 138. The study reports results only for adult males. Plates I and II of the Test are reproduced.—H. Feifel.

2921. Leiter, Russell Graydon. The Leiter adaptation of the Painted Cube Test. Psychol. Serv. Center J., 1949, 1, 29-45.—The developmental history of the use of painted cubes in the study of mental functions is reviewed. Instructions for administering and scoring the Leiter adaptation of the Painted Cubes Test are discussed as well as the development of the Test norms. A table for converting Painted Cubes Adult Scores to mental ages and intelligence quotients is included .- H. Feifel.

2922. Leiter, Russell G. Leiter International Performance Scale, 1948 Revision. Washington, D. C.: Psychological Service Center, 1948.—Ages 4-adult. Individual test. 1 form. Test material (\$82.50); carrying case (\$7.50); record cards (\$3.50 per 300); manual (\$1.00), revision pending.—(J. consult. Psychol., 1949, 13, 386.)

2923. Lundin, William H. (Chicago (Ill.) Community Clinic.) Projective movement sequences: motion patterns as a projective technique. J. consult. Psychol., 1949, 13, 407-411.—Projective Movement Sequences uses the medium of the motion picture to stimulate short stories for analysis. The test film was produced by photographing the movement of black powdered iron filings, regulated by two hand magnets placed beneath a cardboard platform which held the filings. A protocol is presented and analyzed. Scoring categories are suggested. This technique causes the subject to project characteristic and dynamic attitudes and tendencies toward the self and the environment in terms of short stories .-S. G. Dulsky.

2924. Manson, Morse P. The Manson Evalua-tion. Beverly Hills, Calif.: Western Psychological Services, 1948.—Adults. 1 form. Questionnaire form (\$2.50 per 25, \$9.00 per 100), with manual, pp. 2; specimen set (25¢). For alcoholism identification.—(See J. consult. Psychol., 1949, 13, 386.)

2925. Partington, John E., & Leiter, Russell G. Partington Pathways Test. Washington, D. C.: Psychological Service Center, 1949.—Adult males. 1 form (2 parts). (10) min. Test blanks, 2 practice sheets, 2 test sheets (\$1.50 per 100 of each form), with manual, pp. 20; record card (\$3.00 per 100).-(See J. consult. Psychol., 1949, 13, 386.)

2926. Remmers, H. H., & Shimberg, Benjamin. SRA Youth Inventory. Chicago: Science Research Associates, 1949.-Grades 9-12. 1 form. Untimed, (30) min. Carbon hand-scoring form, booklet (48¢); answer pad (\$1.75 per 25). IBM scoring form, booklet (42¢); answer sheet (\$2.90 per 100). Selfinterpreting profile leastet (\$1.00 per 25); manual, pp. 20 (25¢); specimen set (75¢).—See J. consult. Psychol., 1949, 13, 453.)

2927. Reynolds, Ruth T. (Hunter Coll., New York.) Racial attitudes revealed by a projective technique. J. consult. Psychol., 1949, 13, 396-399 .-This test consists of 20 pictures, made by using the heads of figures in magazine illustrations and indicating the rest of the body by stick figures. Each picture contained 2 or 3 persons, some Negro and

some white. Similar to a cartoon technique, in one bubble was the statement of one character and in another were the first few words of a reply. The subject completes the reply. 2 protocols are presented and analyzed.—S. G. Dulsky.

2928. Sommer, A. Le "Test-Puzzle"; un test de comportement d'acquisition facile. (The "Test-Puzzle"; an easily constructed test of behavior.) Enfance, 1948, 1, 212-221.—An inexpensive test of jig-saw puzzle type, employed by the author in examining juvenile delinquents is described. Test norms and their deviations as to intelligence and character disturbances are given. The test has the following advantages: (1) it is not a verbal test; (2) it furnishes a maximum of information of a characterological order; (3) it informs at the same time concerning the intelligence and character of the subject; (4) the interpretation is easy even without long practice; (5) it interests the subjects examined; (6) it fits easily into a small cardboard box and is easily portable.—F. C. Sumner.

2929. Van der Lugt, M. J. A. (New York U.) V.D.L. Psychomotor Test Series for children for the measurement of manual ability. New York: Author, 1949. n. p. (mimeo.)—The V.D.L. Psychomotor Scale for Children is an individual apparatus battery consisting of 10 original tests including a variety of subtests, subsidiary, and control tests. The scale is intended to measure manual ability as expressed by the following psychomotor components: speed, pressure, accuracy, motor memory, and coordination. It is based on the original European investigation, with adaptation to American standards and provisional adjustment of norms to test results obtained from American children. Presented in this publication are historical back-ground, statistical information and results, suggestions for research and application, instructions for administration, norms, and illustrative performances. Appended is a list of announcements and references American journals and excerpts of American articles .- J. Barron.

2930. Wechsler, David. Wechsler Intelligence Scale for Children. New York: Psychological Corporation, 1949.—Ages 5-15. Individual test. 1 form. Test material (\$19.50); record blank (\$1.75 per 25); manual, pp. 113 (\$2.50).—(See J. consult. Psychol., 1949, 13, 453-454.)

(See also abstracts 3271, 3389)

STATISTICS

2931. Barankin, E. W. (U. California, Berkeley.) Locally best unbiased estimates. Ann. math. Statist., 1949, 20, 477-501.—When unbiased estimates exist, the best one is unique. A necessary and sufficient condition is given for the existence of only one unbiased estimate with sth absolute central moment, where s is a chosen number >1. Previous results of several authors are discussed in light of the present theory, and generalizations of some of these results are deduced. Examples are given to illustrate applications of the theory. A bibliography and mathematical derivations are included.-G. C.

2932. Brogden, Hubert E. A new coefficient: application to biserial correlation and to estimation of selective efficiency. Psychometrika, 1949, 14, 169-182.—The author had previously shown that the product-moment r could be interpreted as a direct index of selective efficiency provided the distributions of criterion and predictor are linear. The coefficient presently proposed evaluates selective efficiency of a continuous predictor at given points of cut regardless of applicability of these assumptions. It may also be used as a substitute for biserial r .- M. O. Wilson.

2933. Carlsson, Gösta. Den statistiska analysen av psykologiska data. (The statistical analysis of psychological data.) In Sjöstedt, C. E., Problem i den moderna psykologien. (See 24: 2903), 35-53.— The purposes of statistical methods are discussed. Measures of central tendency, distribution curves and the correlation method are described.—A. Teiler.

2934. Castore, George F. (Colgate U., Hamilton, N. Y.), & Dye, William S. III. A simplified punch card method of determining sums of squares and sums of products. Psychometrika, 1949, 14, 243-250.—The method is described and several advantages in its use are pointed out.-M. O. Wilson.

2935. Cattell, Raymond B. (U. Illinois, Urbana.) A note on factor invariance and the identification of factors. Brit. J. Psychol., Statist. Sect., 1949, 2, 134-139.—The need for objective matching techniques is discussed. Two possible approaches are suggested. The method of coincidence of marker variables and the calculation of chances with a symmetrical marker criterion are described. A general formula for marker coincidence matching is presented. The marker method provides a quick way to assess goodness of fit. It may be even more profitable as research progresses so that highly loaded markers can be put in to represent particular factors. It is also particularly applicable when factors are so clean-cut as to have negligible loadings in other variables.-G. C. Carter.

2936. Cattell, Raymond B. (U. Illinois, Urbana.) rp and other coefficients of pattern similarity. Psychometrika, 1949, 14, 279-298.—The meaning and effects of the total personality configuration are more important than levels in specific variables. Classification of various categorizing patterns (interest profiles, etc.) calls for methods of estimating similarity. A pattern consists of fundaments and relations. Similarity of patterns can be expressed in terms of relations alone or in terms of fundaments and relations. The derivation of a coefficient of pattern similarity is discussed and its properties are investigated in terms of data on culture patterns. 15 references.—M. O. Wilson,

2937. Conrad, Herbert S. (U. S. Office Education, Washington, D. C.) Characteristics and uses of item-analysis data. Psychol. Monogr., 1948, 62(8), vi, 48 p.—The author discusses the types of information which are supplied by this technique of item analysis and deals with the methodology of determining the characteristics of the sampling population, the items and their alternatives. The uses of item-analysis data suggested by Conrad includes (1) "detailed, objective, quantitative information for each item" that cannot be otherwise obtained; (2) provides a "convenient, practical basis for selecting items for subsequent forms of a test" as well as for revisions and improvement of the test items; (3) "the reliability of the test may frequently be improved by the judicious selection of items on the basis of item-analysis data," and other pertinent applications of this procedure. Recommendations designed to increase the values desired are included.—M. A. Seidenfeld.

2938. Goodman, Leo A. (Princeton U., N. J.) On the estimation of the number of classes in a population. Ann. math. Statist., 1949, 20, 572-579.— The best statistic is defined as the one which never gives unreasonable estimates and has the least mean square error. A method for finding this statistic is developed. The case where each element in the population has an equal and independent chance of coming into the sample is used as a model for some sampling procedures. A table and mathematical derivations are included.—G. C. Carter.

2939. Guilford, J. P. (U. Southern California, Los Angeles.), & Michael, William B. The prediction of categories from measurements; with applications to personnel selection and clinical prognosis. Beverly Hills, Calif.: Sheridan Supply Co., 1949. v, 55 p. \$1.40.—The present status of this problem is analyzed, and 2 new approaches are developed: (1) an analytic method for estimating the score required to yield at a designated probability membership in one of two categories formed artificially from measures in a continuous dependent variable; (2) an equation that satisfies the principle of equal likelihood for estimating a critical score in the instance of a dependent variable with a point distribution. 6 tables, 7 figures, 5 nomographic charts based upon the Taylor-Russell tables, 11-item bibliography.—L. N. Mendes.

2940. Kreezer, George L. (Washington U., St. Louis, Mo.) An inverse decibel log frequency method for determination of the transfer functions of psychobiological systems. Science, 1949, 110, 681-684.—"The present paper describes a method by means of which the transfer functions of lumped constant linear systems can be derived from experimentally determined frequency response curves.

. . [It] is applicable to any system that can be regarded to a first approximation as a lumped constant linear system, without regard to the type of components of which it is made up, whether living or nonliving."—B. R. Fisher.

2941. Mollenkoff, William G. (Princeton U., N. J.) Variation of the standard error of measurement. Psychometrika, 1949, 14, 189-230.—Usually

the standard error of measurement is assumed to be constant throughout the score range. The present article shows this to be true provided the test-score distributions are symmetrical and mesokurtic. Empirical verification involved the use of 9 synthetic tests and a 1000-case sample.—M. O. Wilson.

2942. Quenouille, M. H. The joint distribution of serial correlation coefficients. Ann. math. Statist., 1949, 20, 561-571.—An expression of the joint distribution of serial correlation coefficients, circularly defined, is derived. This distribution possesses properties similar to those encountered in the distribution of a single serial correlation coefficient. Approximate forms are investigated and the suitability of the ordinary partial correlation coefficient for large-sample testing is inferred. References, graphs, and formulae are included.—G. C. Carter.

2943. Reyburn, H. A., & Raath, M. J. (U. Cape Town, Union South Africa.) Simple structure: a critical examination. Brit. J. Psychol., Statist. Sect., 1949, 2, 125-133.—It has been claimed that simple structure provides a criterion for the rotation of axes, because it is unique, because it gives invariance, and because it is in accordance with the principle of parsimony. These claims are carefully examined. It is found that with oblique axes, parsimony is not usually secured, and that invariance does not depend on simple structure, but on identity of factors. It is also pointed out that identity requires a more rigorous criterion than is commonly applied. Identity of factors does not seem to have been secured in Cattell's comprehensive analysis of the "sphere of personality."—G. C. Carter.

2944. Rulon, Phillip Justin. (Harvard U., Cambridge, Mass.) Matrix representation of models for the analysis of variance and covariance. Psychometrika, 1949, 14, 259-278.—The method is a pedagogical device designed to simplify the presentation of data on the analysis of variance and covariance to beginning students. It contributes nothing new theoretically. Suggestions on further aids in teaching the subject are invited.—M. O. Wilson.

2945. Sandler, Joseph. (Institute of Psychiatry, London, Eng.) The reciprocity principle as an aid to factor analysis. Brit. J. Psychol., Statist. Sect., 1949, 2, 180–187.—The reciprocity principle implies an equivalence or reciprocity between person factors and test factors. Provided appropriate units are used, the factor-measurements in the test equations are identical with the factor-saturations in the person equations and the factor-saturations in the test equations with the factor-measurements in the personal equations. The reciprocity principle is extended to the singly-centered matrix. Person-equivalents, test-equivalents, and equivalents as aids to rotation are discussed. The solution of an illustrative example is presented.—G. C. Carter.

2946. Swineford, Frances. (Educational Testing Service, Princeton, N. J.) Further notes on differ-

ences between percentages. Psychometrika, 1949, 14, 183-187.—The author previously had developed graphs and a table for determining the statistical significance between two %'s or of a sample necessary to establish significance of a difference of given magnitude. She now presents tables to determine whether a difference represents a chance variation from some hypothetical value other than zero. They are also concerned with whether differences are greater or less than a given magnitude, so that only one tail of the distribution of chance values is used.—M. O. Wilson.

2947. Wherry, Robert J. (Ohio State U., Columbus.) A new iterative method for correcting erroneous communality estimates in factor analysis. Psychometrika, 1949, 14, 231-241.—The method is designed to make the residuals conform to the chance error criteria of zero mean and zero skewness for each row separately. It is applicable to any completed orthogonal factor solution. It can be used as a short cut for Dwyer's extension in adding variables to a matrix or as a short cut in cross-validation factor studies.—M. O. Wilson.

2948. Wolfowitz, J. (Columbia U., New York.) The power of the classical tests associated with the normal distribution. Ann. math. Statist., 1949, 20, 540-551.—The power function of the classical tests associated with the normal distribution is discussed. Proofs of Hsu, Simaika, and Wald are presented and simplified in a general manner applicable to other tests involving the normal distribution. The set theoretic structure of several tests is described. A simple proof of the stringency of the classical test of a linear hypothesis is offered. References and mathematical derivations are included.—G. C. Carter.

REFERENCE WORKS

2949. Feingold, S. Norman. (Jewish Vocational Service, Boston, Mass.) Scholarships, fellowships and loans. Boston: Bellman, 1949. 254 p. \$6.00.—A listing of students' financial assistance available from nearly 300 different agencies and covering many subject fields. Each description gives the qualifications for applicants, funds available, and address for application. The author in a forward describes his procedures in securing the information and in a separate section offers advice to the prospective student in applying for financial aid. The material is indexed by agencies offering aid and by subject fields. 5 page bibliography.—C. M. Louttit.

2950. McCamy, James L. Government publications for the citizen. New York: Columbia University Press, 1949. xiv, 139 p. \$2.50.—Government publications are a medium of communication between the government and the citizen. As an agent for mass communication the library could make such publications available. The author discusses the kinds, distribution, and library use of publications of governments—Federal, State, Municipal, and International.—C. M. Louttit.

ORGANIZATIONS

2951. American Association on Mental Deficiency. (Neil A. Dayton, Secy., P. O. Box 96, Willimantic, Conn.) Officers, Fellows and Members of the . . . Association . . . 1950. Willimantic, Conn.: Author, 1950. 166 p. \$3.00.—Includes alphabetical and geographical lists of members, constitution and by-laws of the association, and a directory of institutions for mentally retarded.—C. M. Louttit.

2952. Peatman, John Gray. How scientific and how professional is the American Psychological Association? Amer. Psychologist, 1949, 4, 486–489.

—The question is raised whether the APA is concerned with both the scientific and professional development of psychology. The Policy and Planning Board has made a survey of APA activities during the year. Three tables are given showing (1) analysis of annual convention programs of the APA 1946–1949; scientific versus professional components: by units and time; (2) unit and time relatives for annual convention programs 1946–1949; (3) annual time spent in activities of the APA—as reported for 360 positions by 243 APA members and employees.—R. Mathias.

2953. Psychometric Society. Constitution of the Psychometric Society. Psychometrika, 1949, 14, 251-256.

(See also abstract 3438)

HISTORY & BIOGRAPHY

2954. Laurance F. Shaffer. Amer. Psychologist, 1949, 4, 507.—Portrait.

2955. Clarke, Fred. Professor H. R. Hamley. Brit. J. educ. Psychol., 1949, 19, 151-153.—Obituary.

2956. Crary, Ryland W. (Columbia U., New York.) John Dewey and American social thought. Teach. Coll. Rec., 1949, 51, 133-135.—The chief element in Dewey's greatness resides in the fact that his strongest influence lies in the future. His philosophy is both liberalizing and liberating, based on reliance in the disciplined intelligence of the ordinary individual. He has given knowledge and morality a greater social meaning. He emphasizes the interrelationship of means and ends. He insists that values require validation, and he expresses confidence in willed intelligent action as man's greatest resource in the solution of his problems.—G. E. Bird.

2957. Krasnov, M. L., & Kravkov, S. V. Akademik M. I. Averbakh. (Academician M. I. Averbakh.) Probl. fisiol. Optiki, 1947, 4, 7-10.—A summary of the life and activity of M. I. Averbakh who died July 29, 1944 at the age of 73. Averbakh founded the Central Helmholtz Ophthalmological Institute in Moscow and was the founder and first editor of the journal Problems of Physiological Optics.—I. D. London.

2958. Lopes, Ernani. Clifford Beers. Homenagem a memoria do grande apostolo da higiene mental. (Clifford Beers. Homage to the memory of the

great apostle of mental hygiene). Rev. Centro psiquidi. nac., Rio de J., 1946, 1, 67-73.—This tribute to the memory of Clifford Beers contains a translation of the XXIV chapter of his "A Mind that Found Itself" and for the first time in Portuguese verses his little poem "Light." Portrait.—A. Manoil.

2959. Spock, Benjamin. C. Anderson Aldrich (1888-1949). Psychosom. Med., 1949, 11, 249.— Obituary. Portrait facing p. 249.

(See also abstracts 3104, 3155, 3365)

PROFESSIONAL PROBLEMS OF PSYCHOLOGY

2960. American Psychological Association. Committee on Ethical Standards for Psychology. Subcommittee on Test Distribution. Ethical standards for the distribution of psychology tests and diagnostic aids. Amer. Psychologist, 1949, 4, 495-501.—This tentative statement of standards, published with an invitation for criticism and revision, was formulated from reports submitted by 85 specialists in various testing areas. Ethical problems connected with test distribution involve qualifications of test users, the psychologists' sponsoring role, qualifications of publishers representatives and of distributors, and readiness of a test for release. 18 principles are formulated.—R. Mathias.

2961. Cannon, Wendell E. (U. Southern California, Los Angeles), & Skinner, Richard C. Teaching educational psychology through direct experience. J. educ. Psychol., 1949, 40, 415-426.—A course in educational psychology was planned so that the students could attend regularly a class in high school English. Goals were formulated, and worksheets directed the students' observation toward relevant aspects of the situation. Readings and conferences supplemented these meetings. At the end of the term the students participated in a detailed evaluation of the course in educational psychology. In general their verdicts were highly favorable.—E. B. Mallory.

2962. Dahr, Elisabeth. Psykologiundervisningen i flickskolan. (Psychological instruction in girls' schools.) In Sjöstedt, C. E., Problem i den moderna psykologien. (See 24: 2903), 135-157.—Psychological instruction in Swedish secondary schools for girls began in 1918; after 1927 psychology was an elective course in most schools. In the 1940 curriculum plans for girls' schools, not yet in effect, psychological instruction is to be compulsory in all lines of study.—A. Tejler.

2963. Ellis, Albert. (The Diagnostic Center, Menlo Park, N. J.) What kinds of research are American psychologists doing? Amer. Psychologist, 1949, 4, 490-494.—A survey of 612 psychological research articles was made in 1947 issues of American and foreign psychological journals. Analysis of the data indicates areas of interest, and the tests and experimental techniques, kinds of subjects, numbers of subjects, and kinds of statistical methods used. The author points out that American psychologists

apparently tend to follow the line of least resistance in employment of techniques, selection of subjects, number of cases, and use of statistical methods.—

R. Mathias.

2964. Proehlich, Clifford P. (U. S. Off. Education, Washington, D. C.) The basic guidance course: an overview or training for job performance. Sch. & Soc., 1949, 70, 19-21.—An outline of a composite first course, based on a survey of such courses, is given. ". . . this type of basic course is not suited to the needs of most persons taking it . . . [and] the present basic courses are not geared to the ideal of less duplication of education and psychology courses." Objectives of the basic course are: (1) students should be assisted to attain competence in use of certain fundamental tools and techniques; (2) the tools and techniques to be taught should be selected on the practical basis of usefulness. A suggestive course based on these objectives is outlined.—R. S. Waldrop.

2965. Kriedt, Philip H. (Prudential Insurance Co., Newark, N. J.) Vocational interests of psychologists. J. appl. Psychol., 1949, 33, 482-488.

On the basis of a pilot study with 95 psychologists, it was found that the 1938 psychologist key for the Strong Vocational Interest Blank was not satisfactory. A new key was developed by contrasting the responses of 1048 psychologists with those of Strong's 1938 professional men-in-general group. Except for the marketing psychologists, all of the sub-groups have a mean score of A. Subkeys were constructed for experimental, clinical, guidance, and industrial psychologists. The new keys are being used by Strong in place of the 1938 key.—C. G. Browne.

(See also abstract 3411)

PHYSIOLOGICAL PSYCHOLOGY

2966. Carmichael, Leonard, Kennedy, John I., & Mead, Leonard L. (Tufts Coll., Medford, Mass.) Some recent approaches to the experimental study of human fatigue. Proc. nat. Acad. Sci., Wash., 1949, 35, 691-696.—Work decrement is often misleading as a measure of fatigue. Fatigue effect showed up as inability (or unwillingness) to maintain over a period of time on a persistence test the initial level of performance. To determine the role of motivation in prolonged effort, continuous measurements were taken of muscle tonus with a portable alertness indicator (see 23: 3614). "The pattern of human fatigue as given in these experiments is thus seen to be one of periodic blocks or interruptions in performance of varying frequency and duration, rather than the continuous decrement as shown in work curves secured in the study of isolated muscle groups."—M. M. Berkun.

2967. Jensen, Gordon Duff, & Stainbrook, Edward. (Yale U., New Haven, Conn.) The effects of electrogenic convulsions on the estrus cycle and the weight of rats. J. comp. physiol. Psychol., 1949, 42, 502-505.—Female albino rats subjected to 15

electroshock convulsions showed a loss of cyclical reproductive activity, as revealed by vaginal smears. Regular estrus reappeared following termination of the shock series. Concomitant with the disturbed estrus was a weight gain without corresponding increase in food intake, a phenomenon the writers ascribe to "water retention and/or diminished energy expenditure." Hyperphagia and sustained weight gain were observed following the shock series.—

L. I. O'Kelly.

2968. Liddell, Howard S. (Cornell U., Ithaca, N. Y.) Adaptation on the threshold of intelligence. In Romano, J., Adaptation, (see 24: 2890), 53-76.—"Man as socius leads a life of intent. . . . man as mammal leads a life of vigilance." Vigilance is a biological tension with motor activity exhibited in certain situations and in response to which "the organism must pattern its activities anew to meet emergencies." The author reviews especially his work on the conditioning of sheep and goats in an appraisal "of those neural capacities of simple mammals that may be employed for the reorganization of behavior under the spur of vigilance."—C. M. Louttit.

2969. Morhardt, P. E. Propos sur l'hérédité. (Observations on heredity.) Psyché, 1949, 4, 596-614.—A distinction is made between false heredity, i.e., phenomena which are passed on from parent to descendant only insofar as the milieu remains constant, and those phenomena that are passed on indefinitely regardless of a changing milieu. The influence of the chromosomes and specific examples of their actions are given. The work of the Russian scientists Lyssenko and Bogomoletz is analyzed in the light of the influence of politics on science in the U.S.S.R.—G. G. Besnard.

2970. Slater-Hammel, Arthur T. (Indiana U., Bloomington.) An action current study of contraction-movement relationships in the tennis stroke. Res. Quart. Amer. Ass. Hith, 1949, 20, 424-431.— "The purpose of this investigation was to obtain objective data on the contraction movement relationships during the tennis forehand drive. Using one member of the University of Iowa's physical education department and 4 undergraduate students all of whom were rated as "good" tennis players as subjects, the results obtained showed: "(1) For the individual subject, the contractionmovement relationships were extremely consistent from one stroke to another. (2) From subject to subject, however, there were extensive variations in timing and general coordination. (3) On the basis of the contraction incidence of the presumable driving muscles, it would appear that the tennis forehand drive is of the non-ballistic type."—M. A. Seidenfeld.

2971. Smith, Homer W. (New York U., Coll. Med.) Organism and environment: dynamic oppositions. In Romano, J., Adaptation, (see 24: 2890), 23-52.—The biological organism as studied by the physiologist cannot be anything more than the sum of its parts. Consideration of a whole which

is more than the sum of its parts is beyond the realm of empirical science. Biological organization finds its prototype in protoplasm. "The stability as well as the reactivity of the organism stems from the tendency of protoplasm to restore itself to the status quo whenever it is disturbed." The problem of consciousness is discussed as a characteristic of physiological organization. 18 references.—C. M. Loutti.

2972. Stone, Calvin P., Eady, H. R., & Hauty, George T. (Stanford U., Calif.) Possible genetic differences in the mortality of mice from electroconvulsive shocks. J. comp. physiol. Psychol., 1949, 42, 427-428.—After finding that a much higher mortality rate existed among mice subjected to electroconvulsive shock than had been experienced with rats, the authors summarized the mortality rates for 3 different strains. The incidence was highest (83.3%) for an albino (cc) strain, and significantly lower for an Extreme Dilute (black eyes; c^HC^H), 11.1%, and for a Fawn strain (ruby eyes; pp) with 25.0%. "This discovery, it would seem, has sufficient merit to justify systematic and extensive study with pure strains of mice . ."—L. I. O'Kelly.

2973. van Wagenen, G. (Yale U. Sch. Med., New Haven, Conn.) Accelerated growth with sexual precocity in female monkeys receiving testosterone propionate. Endocrinology, 1949, 45, 544-546.— Intramuscular injections were started when two rhesus monkeys were 5 months of age. "At 1 year the treated animals reached the weight and length of 2-year-olds and menarche occurred exactly at the end of 1 year in one animal, and 1 year and 19 days in the other. Androgen treatment was then discontinued." Individual weight and length curves are given in 2 figures.—L. A. Pennington.

are given in 2 figures.—L. A. Pennington.

2974. Weiss, Paul. (U. Chicago, Ill.) The biological basis of adaptation. In Romano, J., Adaptation, (see 24: 2890), 1-22.—A distinction should be made between phylogenetic adaptedness, which is genetically determined, and ontogenetic adaptation, which is environmentally or functionally determined. "... the latitude left to direct adaptation is extremely narrow as compared to the wealth of inherited adaptedness of evolutionary origin." The modes of adaptation are so varied that they defy generalization—facts must be secured for each case. The nervous system exhibits the greatest differential between adaptedness or adaptation potentials. 18 references.—C. M. Louttit.

(See also abstract 2907)

NERVOUS SYSTEM

2975. Bailey, Percival. (U. Illinois, Psychiatric Inst., Chicago.) Concerning the functions of the cerebral cortex. J. nerv. ment. Dis., 1949, 110, 369-378.—The variety of functions, general and specific, are related to the cortex as a whole and to its various cytoarchitectural areas. Real understanding of this problem will come when we can ask questions that

can be put to the test of experimental answer. 22 references .- N. H. Pronko.

2976. Barakan, Thais H., Downman, C. B. B., & Eccles, J. C. (U. Otago, Dunedin, N. Z.) Electrical potentials generated by antidromic volleys in quadriceps and hamstring motoneurones. J. Neuro-physiol., 1949, 12, 393-424.—The analysis of histologic and electrical data is based on the postulate . . that antidromic transmission is blocked at the axon-soma junctions of many motoneurones, such blockage occurring in more motoneurones during the depressive action of a conditioning antidromic volley, and in fewer during facilitation by synaptic excitatory action." The initial positive non-labile spike appears to be generated by the axons and the labile components by the somas and dendrites. The potential distribution in the quadriceps motoneurone suggests that the dendrites are distributed dorsally and medially with the impulse propagation failing toward the dendritic terminals. 34 references.—C. E. Henry.

2977. Baryshnikov, I. A. Delstvie nikotina i anabazina na vegetativnum nervnum sistemu. Soobshchenie 1. Vlimanie anabazina i nikotina na uzly vegetativnol nervnol sistemy. (The action of nicotine and anabasine on the vegetative nervous system. Report 1. The influence of anabasine and nicotine on the ganglia of the vegetative nervous system.) Trud. fisiol. Lab. Pavlova, 1947, 14, 127-174.—The excitatory action of anabasine on vegetative ganglia is 3 to 4 times weaker than that of nicotine. The excitatory action of these substances is similar to that of acetylcholine, causing vascular constriction and restoration of fatigued muscles. The report includes a number of studies on the effect of anabasine and nicotine on (1) the intracardiac ganglia of the vagus nerve in the frog and turtle, (2) the isolated hearts of the rabbit, cat, frog, and turtle, and (3) the blood vessels of isolated organs.-I. D. London.

2978. Borison, Herbert L., & Wang, S. C. (Columbia U., New York.) Functional localization of central coordinating mechanism for emesis in cat. J. Neurophysiol., 1949, 12, 305-313.—Electrical stimulation at about 8 V. at 50/sec. elicited vomiting in 11 of 20 decerebrate cats. The concept of a "center" for vomiting is discussed; this region is in the dorsolateral border of the lateral reticular formation and the nearby solitary fasciculas and

nucleus.-C. E. Henry.

2979. Clark, George; Chow, Kao Liang; Gillaspy, Carrie C., & Klotz, D. A. (Chicago (Ill.) Med. Sch.) Stimulation of anterior limbic region in dogs. J. Neurophysiol., 1949, 12, 459-463.-Electrodes were aseptically implanted on the sigmoid gyrus and anterior cingular gyrus in 10 dogs. Electrical stimulation with 60-cycle sine waves was carried out the following day in the absence of anesthesia. In the 8 dogs with proper electrode placement cingular stimulation stopped or virtually stopped respiration. There was no evidence whatever of suppressor effects on other activity. Likewise, responses to motor

point stimulation were unaffected by cingular stimulation. Following induction of Dial anesthesia. however, suppression could be demonstrated.—C. E.

2980. Cohn, Robert. (U. S. Naval Hosp., Bethesda, Md.) Clinical electroencephalography. New York: McGraw-Hill, 1949. vii, 639 p. \$14.00. The format of record sample verso with case history and record analysis is utilized throughout. All records are from the Grass Model II 6-channel instrument recorded at considerable gain and shown as a 9-sec. sample at † reduction. The introduction discusses wave phenomena, electrical circuits and apparatus, EEG origin and interpretation, and the classification used throughout. The first group of 19 records illustrates the wide "range of normal variation." Succeeding chapters deal in detail with: intracranial space-taking lesions; cerebral vascular lesions; arterial hypertension; encephalopathies; head injury-recent and old; the various epilepsies; migraine; headaches; normal sleep and narcolepsy; alcoholism; behavior disorders. A 50-page chapter deals with such clinical electric relationships as seen in hyperemotionality, electric shock therapy, drug intoxication, hypoglycemia, myopathy, strephosymbolia and the records of children.—C. E. Henry.

2981. Davis, H. A., Grant, W. R., McNeill, W. P., Wilkinson, R. F., & Marsh, C. (Coll. Med. Evangelists, Los Angeles, Calif.) Effects of hemorrhagic shock upon the electroencephalogram. Proc. Soc. exp. Biol., N. Y., 1949, 72, 641-643.—The effects of anemic anoxia, produced by controlled bleeding, upon the electrical activity of the rabbit cortex are described. Results indicate that moderate to deep shock slows the frequency to 2 to 4 per sec., increases the amplitude to 150 to 200 microvolts. The characteristics of the wave are given for reversible and irreversible shock; the pattern becoming "a better prognostic criterion than that of blood pressure. The conclusion is reached that the EEG changes in hemorrhagic shock are due "in part at least, to cerebral anoxia."—L. A. Pennington.

2982. Essig, C. F., Hampson, J. L., Bales, P. D., Willis, Alice, & Himwich, H. E. (Army Chemical Center, Md.) Effect of panparnit on brain wave changes induced by discorpopyl fluorophosphate (DEP). Science, 1950, 111, 38-39.—By EEG assay, "the anti-convulsant property and the protective function of Panparnit" was found to be effective in combining to abolish the "grand-mal like patterns produced by DEP," in each of ten instances, using curarized albino rabbits. (Similar therapeutic effects on cardiac function were obtained.) "the cholinesterase levels of both cerebral cortices and right midbrain remained depressed. discussion of implications for physiological theory, and description of method.—B. R. Fisher.

2983. Freeman, Walter. (George Washington U., Washington, D. C.) Mass action versus mosaic function of the frontal lobe. J. nerv. ment. Dis., 1949, 110, 413-418.—Any theory regarding the functions of the frontal lobe must include their normal development from infancy on. Simple movements under the control of the frontal motor cortex are elaborated into mechanical, social, occupational, recreational and creative skills. Simple visceral sensations develop into orientation responses, social and spiritual self-consciousness, and creative ecstacy. Since the last function is the only one destroyed by transorbital lobotomy, "it may safely be attributed to the most anterior portions of the frontal lobes."— N. H. Pronko.

2984. Garvin, J. S., & Amador, L. V. (U. Illinois, Chicago.) Electrocorticograms of the cytoarchitectural areas of Macaca mulatta. J. Neurophysiol., 1949, 12, 425-433.—Under Dial anesthesia there are marked differences in the electrical activity of various brain regions. Pre- and post-central regions are similar, showing a characteristic spikey activity; occipital areas show very low voltage 10-12 per sec. activity. The frontal brain shows 3 per sec. with faster superimposed. Central regions show further areal differentiation. Curarized animals show similar but less pronounced difference. Animals under local anesthesia show much fast activity in central regions, with suppression of such activity seen during movement. It was not possible to correlate these and the numerous other reported differences with the underlying cytoarchitecture.—C. E. Henry.

2985. Gualtierotti, T., Martini, E., & Marzorati, A. (U. Milan, Italy.) Electronarcosis. I. Inhibition of electrical activity of cerebellum. J. Neurophysiol., 1949, 12, 363-369.—Square wave stimulation at 280 impulses per sec. (voltage unspecified) of the cat diencephalon causes virtually complete inhibition of cerebellar electrical activity. Partial and often abrupt recovery occurs in 15-20 minutes. The same stimulus applied directly to the cerebellar cortex results in inhibition confined to the interelectrode region. The inhibitory center was determined to extend to the most cranial part of the pons, the section of which markedly increased spontaneous cerebellar activity.—C. E. Henry.

2986. Hoefer, P. F. A. (Columbia U., New York.) Regional physiology of the central nervous system. In Spiegel, E. A. Progress in neurology and psychiatry, 1947, (see 24: 3261), 38-43.—Papers dealing with the cortex and its projections, midbrain, medulla and cord, spinal segments, and autonomic regulation are reviewed for 1946. 22-item bibliography.—C. E. Henry.

2987. Hughes, J. Electroencephalography. In Spiegel, E. A. Progress in neurology and psychiatry, 1947, (see 24: 3261), 234-245.—This reviewer has selected 35 papers for 1946, dealing largely with the clinical and experimental application of electroencephalography. Technique and apparatus as well as new types of analyzers are mentioned.—C. E. Henry.

2988. Jarcho, Leonard W. (Johns Hopkins U., Baltimore, Md.) Excitability of cortical afferent systems during barbiturate anesthesia. J. Neurophysiol., 1949, 12, 447-457.—Paired conditioning

and test shocks were applied to a superficial sensory nerve of the Nembutalized cat and the cortical response determined for different depths of anesthesia. The absolutely unresponsive period is (reversibly) increased with deeper anesthesia; there is no evidence of a supranormal or subnormal period. Excitability is depressed in the presence of thalamocortical afterdischarge, the 8-12/sec. barbiturate "bursts" and some types of background activity. It is therefore concluded that such activity travels in neurones of the somesthetic pathway. 23 references.—C. E. Henry.

2989. Kaada, B. R., Pribram, K. H., & Epstein, Respiratory and vascular responses in monkeys from temporal pole, insula, orbital surface and cingulate gyrus. J. Neurophysiol., 1949, 12, 347-356.—Electrical stimulation of temporal and frontal poles was carried out in 8 monkeys under amytal and dial anesthesia. Optimal parameters of the stimulus were 40/sec. 10 msec. square pulses at 3-6 V. Vascular and respiratory responses were obtained from a continuous stretch of essentially agranular cortex extending over the anterior insula, posterior orbitofrontal surface, the subcallosal region, rostral limbic gyrus and the basal olfactory structures. Cutting of corticocortical fibers did not alter these responses, although subcortical interruption abolished them. Only inconstant respiratory changes were seen even at 15 V. from stimulation of the lateral surface of the frontal lobe.-C. E. Henry.

2990. Kellogg, W. N. (Indiana U., Bloomington.) Locomotor and other disturbances following hemidecortication in the dog. J. comp. physiol. Psychol., 1949, 42, 506-516.—This report summarizes a long series of qualitative observations made on 21 hemidecorticated dogs, all chronic preparations. There is an enduring rigidity of the limbs contralateral to the lesion, accompanied by bizarre and awkward postures and a disturbance of reflex patterns. There is an homonymous hemianopia when the occipital lobe is removed. The animal shows inability to walk in a straight line, circling towards the side of the lesion. This disappears within 3-4 months after the operation, although the absent reflexes and the hemianopsia are not recovered. The writer points to the need for adequate observation time following ablation experiments to allow for correct relationships between neural deficit and behavior to emerge. -L. I. O'Kelly.

2991. Kuntz, A. (St. Louis U. Sch. of Med., St. Louis, Mo.) The autonomic nervous system. In Spiegel, E. A. Progress in neurology and psychiatry, 1947, (see 24: 3261), 164-182.—The 78 papers reviewed for 1946 deal less with anatomy and more with physiologic and clinical aspects.—C. E. Henry.

2992. Livanov, M. N., & Preobrazhenskaia, N. S. (Brain Research Inst., Moscow.) Krivaia elektrofiziologicheskoi reaktivnosti kory golovnogo mozga v otvet na svetovye razdrazhenia narastaiushchel iarkosti u cherepno-mozgovykh ranenykh. (The curve of electrophysiological reaction of the cerebral cortex in response to light stimuli

of increasing brightness in the cranio-cerebrally wounded.) Probl. fisiol. Optibi, 1947, 4, 96-107.— Near locale of neural cicatrization there are observable (1) an increase of cortical excitability, (2) a sharp decline in the "diapason of brain efficiency" (weakening of oscillations in the electroencephalogram during bright flickering light), and (3) an inhibitory type of reactivity curves. In the distant parts of the affected hemisphere the symptoms are in most cases opposite or not present. The sound parts of the unaffected hemisphere, symmetrical to the affected ones, show changes resembling those found near the place of the wound in the affected hemisphere, though less intensive.—I. D. London.

2993. Livshifs, N. N. Vlifanie ekstirpatsii mozhechka na uslovno-reflektornuiù deiatel'nost' sobak. (The effect of cerebellar extirpation on conditioned reflex activity in dogs.) Trud. fisiol. Lab. Pavlova, 1947, 14, 11-50.—The influence of the cerebellum on the cerebral cortex varies with the type of nervous system possessed by the dog. Canine "cholerics" undergo weakening of the excitatory processes with extirpation of the cerebellum. No noticeable changes of conditioned reflex activity in dogs of the "strong, equable, inert type" were observed after the acute postoperative period. After cerebellar extirpation the influence of pain on the conditioned reflexes weakens. This change of cortical reaction to painful stimuli is expressed to a very marked degree in "canine-cholerics," but not significantly in "canine-phlegmatics." Through the vegetative nervous system the cerebellum exercises a constant adaptive action on the cerebral cortex, regulating the course of the excitatory and inhibitory processes there. This is in accordance with Orbeli's theory of the adaptive-trophic role of the cerebellum. -I. D. London.

2994. Loofbourrow, G. N. (U. Kansas, Lawrence), & Gellhorn, E. Proprioceptive modification of reflex patterns. J. Neurophysiol., 1949, 12, 435-Afferent stimulation of several peripheral nerves in cats and monkeys under Dial (Ciba) elicited specific response patterns (EMG's) in leg Proprioceptive modification of these muscles. patterns was achieved through (a) fixation of joints to extend certain muscles, and (b) directly loading specific muscles. . . . The facilitation of synergists and 'associated synergists' by the means described is often accompanied by a reciprocal inhibition of antagonists, as illustrated by the inhibition of a reflex response of the tibialis by a load on the gastrocnemius. Co-innervation of an antagonist may be brought about by intense proprioceptive facilitation of the agonist (with the antagonist at a corresponding disadvantage). It is emphasized that the proprioceptive 'facilitation patterns' are the same as the activity patterns (muscle groups) elicited by cortical stimulation, by reflex (afferent nerve) stimulation, and by the passive stretch of muscles."—C. E. Henry.

2995. Peterson, Eric W. (U. Illinois, Chicago), Magoun, H. W., McCulloch, Warren S., & Lindsley, Donald B. Production of postural tremor. J. Neurophysiol., 1949, 12, 371-384.—EEG, EMG, clinical and histologic studies were carried out in these chronic experiments on Macaca mulatta following the placing of electrolytic lesions in the brain stem. Clinical terminology employed is carefully defined; protocols, reconstructions and electrical records are shown in detail. Results indicate postural tremor follows lesions in the tegmental portion of midbrain, dorsal to the central part of the substantia nigra. Unilateral lesions produced contra-lateral tremor. The EMG in postural tremor showed regular agonist-antagonist alternation at 6-8/sec. with augmentation during passive stretch, excitement and postural adjustment. Such tremor disappears during active movement; there is no single body tremor frequency. Action tremor, with dispersed bursts and without clear alternation, resulted from lesions in the superior cerebellar peduncle. 24 references.—C. E. Henry.

2996. Pollock, George Howard. (U. Illinois, Chicago.) Central inhibitory effects of carbon dioxide. I. Felis domesticus. J. Neurophysiol., 1949, 12, 315-324.—The EEG of the un-anesthetized cat shows increased frequency and decreased amplitude in the presence of high concentrations of CO₂. EKG rate is increased by 15% CO₂ and slowed by 30% CO₂. CO₂ antagonizes both metrazol and electrically induced seizures, the effect being proportional to CO₂ concentration and independent of O₃ partial pressure. The convulsive response to electric shock is increased by hyperventilation and high O₂ concentrations in nitrogen; the reverse effect is seen under low O₃ and 100% nitrogen. No seizure activity was seen following cerebellar stimulation.—C. E. Henry.

2997. Pool, J. Lawrence, & Ransohoff, Joseph. (Columbia U., New York.) Autonomic effects on stimulating rostral portion of cingulate gyri in man. J. Neurophysiol., 1949, 12, 385-392.—Stimulation of cingulate gyrus in man yielded autonomic effects in all 12 cases here reported. Voltages probably ranged from 6-36 at a frequency of 60 per sec. Eight of 12 cases showed a rise in systolic and diastolic blood pressure, sometimes persisting beyond the stimulus period. Pulse rate was increased in 3 and decreased in 7 cases on stimulation. 2 cases showed a rise and 2 a fall in respiratory rate. No autonomic changes were observed on stimulation of Brodman's areas 9 & 10.—C. E. Henry.

2998. Rasmussen, A. T. (U. Minnesota, Minneapolis.) Neuro-anatomy. In Spiegel, E. A., Progress in neurology and psychiatry, 1947, (see 24: 3261), 1-13.—This review of the 1946 literature includes sections dealing with terminology, cerebral circulation, cortex (with emphasis on visual and auditory systems), midbrain, cerebellum, extrapyramidal system (briefly), cranial and spinal nerves and the autonomic nervous system. 48-item bibliography.—C. E. Henry.

2999. Snider, Ray S., & Magoun, H. W. (Northwestern U., Chicago, Ill.) Facilitation produced by

cerebellar stimulation. J. Neurophysiol., 1949, 12, 335-345 .- "Facilitation of reflex activity and of movements evoked from the cerebral cortex was elicited by stimulation of (i) anterior lobe-lobulus simplex region and (ii) paramedian lobule-tuber vermis-pyramis region of the cerebellum. It is easier to elicit the effects in monkeys than in cats. The most pronounced effects were obtained when chloralosane anesthesia was used and electrical stimulation of 200 to 400 cycles per sec. were applied to the cerebellum from 5 to 15 seconds before the elicitation of the reflex or cerebral induced movement. Subthreshold cerebral stimuli may become threshold stimuli if either of these two regions of the cerebellum are adequately activated. Post-stimulatory inhibition and prolonged facilitation were frequently observed. The role of facilitation in cerebellar function is discussed."-C. E. Henry.

3000. Snider, Ray S., McCulloch, W. S., & Magoun, H. W. (Northwestern U., Chicago, Ill.) A cerebello-bulbo-reticular pathway for suppression. J. Neurophysiol., 1949, 12, 323-334.—"Studies on the suppression of reflexly induced and cortically induced (cerebral) movements by electrical activation of the anterior cerebellar lobe and paramedian lobules plus nearby folia are reported. Frequencies of 200 to 300 pulses per sec.—usually 300 per sec.—were found to be most effective for cerebellar stimulation. The pathway concerned with suppression from the cerebellum is: cerebellar cortex to nucleus fastigii to bulbar reticular formation, thence to the spinal cord via the reticulo-spinal tracts. Evidence is presented which shows that the suppressor areas, the facilitatory areas, and the tactile areas of the cerebellum are practically coextensive."—C. E. Henry.

3001. Spiegel, E. A. (Temple U., Philadelphia, Pa.), & Marks, M. General neurophysiology. In Spiegel, E. A., Progress in neurology and psychiatry, 1947, (see 24: 3261), 14-37.—The literature for 1946 is reviewed under the four headings of chemical phenomena, acetylcholine, electrical phenomena and other properties (injury, pain, neuron chains, stimulation, conditioning, etc.). 144 item bibliography.—C. E. Henry.

3002. Toman, J. E. P., & Goodman, L. S. Pharmacology of the nervous system. In Spiegel, E. A., Progress in neurology and psychiatry, 1947, (see 24: 3261), 62-88.—Of the estimated 4,000 publications on this topic that appeared in 1946 the authors have cited 218 of special interest in this compact review.—C. E. Henry.

(See also abstracts 3019, 3026, 3027)

RECEPTIVE AND PERCEPTUAL PROCESSES

3003. Brown, Francis R. Testicular pain: its aignificance and localization. Lancet, 1949, 256, 994-999.—Experiments and clinical observations are reviewed to support the conclusion that "testicular

or ovarian" pain is not localized in the structures named but in the lower abdomen near the site of embryological origin. The findings are discussed with reference to the phenomena of referred pain.—

A. C. Hoffman.

3004. Eckl, E., & Jarisch, A. Die Temperatur-empfindungen bei der reaktiven Hyperämie. (Temperature sensations in reactive hyperemia). Forschungen und Forscher der Tiroler Arsteschule (1945-1947). Innsbruck: Universität, 1947, 141-149.-After the skin temperature had been raised by immersion in water for 10 minutes, the blood flow in the arm of 8 subjects was interrupted for 10 minutes by means of a tourniquet. Irrespective of the skin temperature, similar sensations were reported by all subjects after circulation had been restored: first, a sensation of heat occurred which then changed to warmth and terminated after 5-8 minutes. With low initial skin temperatures the results were less impressive. These paresthesias are explained as the result of an inadequate excitation of the skin receptors. It is concluded that the stimulating effect is based upon the arterial character of the blood, the paresthesias resulting from a postanoxemic excitation of the thermoreceptors. sequence cold-warm (hot) corresponds to other peculiarities of the temperature sense, namely that the stimulation of cold spots results in rapid maximal sensation, whereas the sensation from warm spots rises gradually. Sensations of cold also have a shorter latency period.-H. H. Strupp.

3005. Fraisse, P. (Sorbonne, Paris, France.) Etude comparée de la perception et de l'estimation de la durée chez les enfants et les adultes. (Comparative study of the perception and estimation of duration in children and adults.) Enfance, 1948, 1, 199-211.—4 groups of 12 subjects each were used in the experiment. The subject hears in a loud speaker a continuous sound for the filled durations, or 2 brief sounds defining empty durations, of .5 sec; 1 sec; 5 secs; 20 secs. The durations are immediately reproduced by the S. The perception of duration, either empty or filled, presented no differences for the ages studied. Rough estimation of filled durations is possible when that of empty durations is still non-existent.—F. C. Sumner.

3006. Kellgren, J. H. (U. Manchester, Eng.) Deep pain sensibility. Lancet, 1949, 256, 943-948.— The characteristics of deep pain (i.e. from structures other than the dermal layers of the body) considered are: the stimuli which produce it (mechanical, thermal, and chemical), the variation in sensitivity of deep structures to pain, the possible receptors and nerve supply (it is regarded as probable that the nervous mediation of deep pain is different from that of cutaneous pain), the frequently false localization of deep pain "undoubtedly results from the stimulation of sensory fibres in continuity at some point between the appropriate receptors and the brain"), the characteristics of the segmental muscle spasm which accompanies severe and prolonged deep pain and the greater (than in the case of cutaneous pain)

susceptibility of deep pain to rapid cooling of deep tissue.—A. C. Hoffman.

3007. Nyman, Alf. Btt jordskred inom psykologien. (A revolution in psychology.) In Sjöstedt, C. B., Problem i den moderna psykologien. (See 24: 2903), 9-34.—The author criticizes the tacit implications of classical psychology, pointing out the many new developments of psychology, particularly after 1912. For example, the "constance axiom" held that a stimulus can only elicit one and the same sensation or, in other words, a one-to-one relationship exists between stimulus and sensation. This and five other axioms are discussed, together with modern arguments against them.—A. Tejler.

3008. Theobald, G. W. (St. Luke's Hosp., Bradford, Eng.) The rôle of the cerebral cortex in the apperception of pain. Lancet, 1949, 257, 41-47; 94-96.—A series of observations are reviewed to show that: (1) certain types of referred pain may be prevented by anaesthetising the cutaneous areas to which the pain is referred; (2) pain referred from a viscus or from 1 somatic pathway to another is often localized with precision; and (3) any sharp or severe pain lowers the threshold in the relevant afferent arcs or in the cells of the cerebral cortex. It is held that these phenomena are not explicable by any hypothesis involving the spinal cord (e.g. afferent arcs entering similar segments of the cord). Rather, the pain "image" or "capacity" is elaborated in the higher levels of the sensorium from afferent stimuli (most of them non-painful); pain impulses which reach the cerebral cortex are referred to these higher levels for assessment; from these cells impulses travel to the thalamus .- A. C. Hoffman.

3009. Witkin, H. A. (Brooklyn Coll., N. Y.) Orientation in space. ONR (Res. Rev.), 1949 (Dec.), 1-7.-To determine under what conditions disorientation during flight occurs a variety of test situations has been developed. Two of these are described. Each consists of a small room, containing a chair: in one these can be tilted to left or right by any amount, and in the other the room and chair may be tilted and the entire unit may be rotated. An account is given of a variety of disorientation experiences during which the person is in error about his own position in space, and about the position of his surroundings. Some people, because of too great dependence on visual impressions, are particularly subject to disorientation. A standardized test has been developed for evaluating the individual's ability to keep his bearings under various circumstances. This test is now being validated against flight performance.—H. A. Witkin.

3010. Witkin, H. A. (Brooklyn Coll., New York.) Sex differences in perception. Trans. N. Y. Acad. Sci., 1949, 12, 22-26.—The sexes were compared (1) in ability to reorient themselves and external objects to an upright position in a tiltable chair and room, (2) in ability to perceive embedded parts of complex figures, (3) in maintaining upright position under varying visual environments, and (4) in localizing an object when visual and auditory stimuli from it

were discrepant. The men were superior on the first two; in the third, women initially were less stable but improved with continued testing; in the last, women tended to rely more on visual cues than men did. These differences probably must be accounted for at the personality level.—J. Bucklew.

(See also abstract 3055)

VISION

3011. Babskil, E. B. (Lenin State Pedag. Inst., Moscow, U.S.S.R.) Znachenie simpatichesko'i nervno'l sistemy v regulatsii vozbudimosti zritel'nogo analizatora. (The significance of the sympathetic nervous system in the regulation of the excitability of the visual analyser.) Probl. fisiol. Optiki, 1947, 4, 17-30.—Optic sympathectomy prolongs chronaxie of eye on operated side. Adrenalin injections, on the contrary, shorten optic chronaxie. After optic sympathectomy dark-adaptation is considerably impaired for some years after operation. Adrenalin injections accelerate dark-adaptation and increase sensitivity to light. The conclusion is drawn that the sympathetic nervous system exercises an "adaptive influence" on the visual analyser.—I. D. London.

3012. Baumgardt, Ernest. Les théories photochimiques classiques et quantiques de la vision et l'inhibition nerveuse en vision liminaire; partie expérimentale. (Classical and quantum photochemical theories of vision and neural inhibition in liminal vision; experimental section.) Rev. Opt. (théor. instrum.), 1949, 28, 661-690.—Experiments are reported which show that the liminal quantity i t (i = liminal luminous intensity, t = time) remains constant down to a certain (7) value of t (depending upon the size and location of the retinal area stimulated) and increases thereafter in a regular manner. An apparatus was used which provided light stimuli as brief as 4×10^{-8} sec. Measurements were made of variation in the quantity i · s (where s is size of area of retina stimulated), using peripheral vision at 15° with visual angles ranging from 2.2' to 8°. With a blue light (pure rod vision) Ricco's integration law was found to hold for visual angles up to about 45'. Above a visual angle of 1.6°, Piper's law applied. Between these two points was a transition zone. With a red light (pure cone vision) Piper's law held for angles between 8' and 6°. Between 4' and 6' Ricco's law applied when observations were made without an artificial pupil; with an artificial pupil an intermediate law was found to hold. For red and green lights viewed foveally the liminal quantity was determined to be a function of artificial pupil size when the visual angle was below 6'. Above 6' the observed law falls between the one postulated by Pieron (and by Elsberg and Spotnitz) and Piper's law. concluded that the liminal quantity is a function of the dioptrics of the eye. Results were discussed in terms of the quantum theory and the statistics of liminal vision, taking into account the phenomena of neural inhibition.-R. W. Burnham.

3013. Bouma, P. J. Physical aspects of colour; an introduction to the scientific study of colour stimuli and colour sensations. New York: Elsevier Publishing Co., 1949. 312 p. \$5.50.—This is a posthumous translation of a text published at Eindhoven in 1946. "The classification and measurement of colours will form the pièce de resistance of this book. After an introductory discussion of classification, there follows the theoretical basis of colour measurement and colour calculation, illustrated by examples." One chapter traces the history of the science of color. The scope of the text is indicated by titles for other chapters: brightness, color triangle, C.I.E. coordinate system, colorimetry, defective color vision, color discrimination and practical applications.—N. R. Bartlett.

3014. Dobson, J. P. (U. S. Naval Air Missile Test Cntr., Pt. Mugu, Calif.) Emotional background of myopia. J. Aviat. Med., 1949, 20, 365-370.—The author suggests that myopia can result from prolonged parasympathatonia due to emotional disturbances. To test his notion, the author questioned 16 consecutive persons reporting to his clinic with myopia. Twelve of the 16 revealed an early history of disturbed home relationships.—A. Chapanis.

3015. Gurevich, M. M. (Order of Lenin State Optical Inst., Leningrad.) Vozmozhnafa forma krivykh chuvstvitel'nosti trëkh priemnikov glaza. (Possible form of sensitivity curves of the three receptors of the eye.) Probl. fiziol. Optiki, 1947, 4, 131-138.—Three new curves for fundamental color excitation are calculated. Pitt's data on the color vision of dichromats were used.—I. D. London.

3016. Hartridge, H. Colour blindness in the light of recent theories of colour vision. Practitioner, 1949, 163, 182–186.—Modern investigations on color blindness shows at least 3 types of conditions. 3 color theories do not satisfy these findings. Therefore a polychromatic theory with possibly as many as 7 types of color receptors is considered necessary.—F. C. Sumner.

3017. Jaffe, Norman S. (86 Vernon Ave., Brooklyn, N. Y.) True psychosensory dilation and delayed psychosensory dilation of the pupil; a preliminary report. Amer. J. Ophthal., 1949, 32, 1681-1686.—Two mechanisms are active in psychic dilation of the pupil: sympathetic stimulation from immediate cortical activity; a delayed hormonal reaction mediated through the release of adrenalin.—D. Shaad.

3018. Kolesnikova, N. I. (Helmholtz Central Opthalmolog. Inst., Moscow.) Vlianie bleskosti na vidimost'tsvetnykh ognel. (The influence of glare on the visibility of colored lights.) Probl. fiziol. Optiki, 1947, 4, 46-64.—The influence of glaring white and colored light sources on foveal sensitivity was investigated. Sensitivity to red light is least affected by glare. A number of quantitative relationships are established involving the variables: angular distance of source of glare from point of fixation, brightness of glare, and conditions of visual adaptation.—I. D. London.

3019. Kravkov, S. V. (Helmholts Central Ophthalmolog. Inst., Moscow.) Nabludenia nad elektricheskol chuvstvitel'nost' û glaz pri cherepnomozgovykh raneniakh. (Observations on ocular electrical sensitivity in subjects with cranio-cerebral lesions.) Probl. fisiol. Optiki, 1947, 4, 87-95.—Where there are cranio-cerebral lesions, as a rule the level of electrical sensitivity of the eye is lowered. Level of electrical sensitivity correlates positively with size of the visual field.—I. D. London.

3020. Kravkov, S. V. (State Inst. Psychol., Moscow.) O nekotorykh zakonomernostiakh zavisimosti zrenifa ot pobochnykh razdrazhitelel. (On some regularities involving the effect of indirect stimuli on vision.) Probl. fisiol. Optiki, 1947, 4, 31-45.—The author considers a large number of experiments on the effect of indirect stimuli on vision and suggests the following generalizations: (1) Exaggeration of large and minimization of small brightness differences are the rule. (2) The green and red sensory apparatus exhibits an inverse relationship to each other as regards effects mediated by the vegetative nervous system. (3) Reversal of effects, brought on by indirect stimuli, frequently occur following their cessation. (4) Visual responses are modifiable by sensory conditioned reflexes .-I. D. London.

3021. Kravkov, S. V., & Galochkina, L. P. (Helmholtz Central Ophthalmolog. Inst., Moscow.) Deistvie posto(annogo toka na zrenie. (The effect of a constant current on vision.) Probl. fisiol. Optiki, 1947, 4, 77-86.—An investigation was made on the effect of a constant electrical current (strength: 0.02 mA; duration: 3 and 15 min.) on peripheral light-sensitivity and central color-sensitivity. Electrotonic phenomena are in evidence: (1) When the anode is applied to the eye-ball, peripheral visual sensitivity and foveal sensitivity to spectral green-blue increase, whereas sensitivity to spectral orange-red decreases. (2) When the cathode is applied, the effects are reversed. The changes in sensitivity caused by the after-effect of the current are usually opposite to those observed during the time of current action. No electrically dependent changes of color sensitivity to red, violet, and yellow light (from about 570 mμ) were noticed. The authors point to the change in relative concentration of K and Ca ions near the poles as a possible explanation of the experimental data.—I. D. London.

3022. Kravkov, S. V., & Semenovskaia, E. N. (Helmholtz Central Ophthalmolog. Inst., Moscow.) Posledelstvie osveshchenia makuliarnol oblasti setchatki krasnym i zelënym svetom na svetovuju chuvstvitel'nost'palochek, raspolozhennykh na 10° i 40° ot sentral'nol iamki. (The after-effect on the light sensitivity of rods, situated 10° and 40° from fovea centralis, resulting from illumination of the roble. fisiol. Optiki, 1947, 4, 65-70.—After illuminating the macular area, peripheral retinal sensitivity changes, exhibiting phases of decreasing and increasing excitability. The rapidity, depth, and

expansion of observed changes in excitability are different, depending on the color of the light illuminating the macular area.—I. D. London.

3023. LeGrand, Yves. Les seuils différentiels de couleurs dans la théorie de Young. (The explanation of color difference thresholds in terms of Young's theory.) Rev. Opt. (théor. instrum.), 1949, 28, 261-278.—The MacAdam standard-deviation-of-a-match ellipses, which represent differential thresholds at constant luminance in the ICI chromaticity diagram, may, it is said, be explained easily by the Young-Helmholtz trichromatic theory, if Fick's hypothesis of the derivation of dichromatism is accepted. It is concluded that the trichromatic theory is adequate to explain color difference thresholds. It is pointed out that color difference thresholds may also be explained, though less parsimoniously, by theories of Ladd-Franklin, Granit, and Pieron.-R. W. Burnham.

3024. Litinskil, G. A. (Helmholts Central Ophthalmolog. Inst., Moscow.) Dinamika glaznykh myshts i binokuliarnoe vosprilatie glubiny (vdal'). (Dynamics of the ocular muscles and binocular perception of depth (into the distance). Probl. fisiol. Optiki, 1947, 4, 73–76.—The evidence of this study indicates that stereoscopic vision is best when the abduction-adduction ratio ranges from 0.66 to 1.00.

—I. D. London.

3025. Litinskii, G. A. (Helmholtz Central Ophthalmolog. Inst., Moscow.) Glubinnoe zrenie vdal' u lifs a ponizhennol ostrotol zrenia odnogo glaza. (Depth vision in persons with reduced monocular visual acuity.) Probl. fiziol. Optiki, 1947, 4, 71-72.— This study on stereoscopic vision establishes the fact that stereoscopic vision progressively worsens, the more deficient the visual acuity of one of the eyes.—

I D London

3026. Livshits, N. N. Ob individual'nol chuvst-vitel'nosti k UVCH. (On individual sensitivity to ultrahigh frequency fields.) Trud. fisiol. Lab. Pavlova, 1947, 14, 64-76.—The action of ultrahigh frequency fields of weak intensity on the cerebellar region may bring on a change of sensitivity in peripheral vision. Such reactivity to ultrahigh frequency does not appear to be associated with any definite illness. Reactivity is most often encountered in weakened patients, but disappears in cases of extreme adynamia.—I. D. London.

3027. Livahita, N. N. Temnovaia adaptatsiia glaz pri vozdelstvii polia UVCH na zatylochnusi oblast. (Dark adaptation of the eye under the influence of an ultrahigh frequency field on the occipital region.) Trud. fisiol. Lab. Pavlova, 1947, 14, 51-63.—The action of an ultrahigh frequency field on the nervous system is dependent on the physiological state of the organism. Evidence points to the cerebellum and the vegetative nervous system as the agents of control, within very broad limits, over the sensitivity of the eye. By means of ultrahigh frequency action on the central nervous system it is possible to return a dark-adapting eye to a state approximating that of the light adapted. The sensitivity of the eye at

maximal dark adaptation is not fixed, but can be shifted in the direction of increasing or decreasing sensitivity in some cases by as much as 150 times.—

I. D. London.

3028. Luizov, A. V. (Order of Lenin State Optical Inst., Leningrad.) Stroboskopicheskoe nabludenie neperiodicheskogo professa. (Stroboscopic observation of a nonperiodic process.) Probl. fisiol. Optiki, 1947, 4, 117-125.—An object in progressive motion, when observed through a rotating obturator, is seen as a series of separate spots. Formulae are theoretically derived for determining the size of these spots and the distribution of the perceived contrast in them. These formulae are verified experimentally.—I. D. London.

3029. Luizov, A. V. (Order of Lenin State Optical Inst., Leningrad.) O vidimosti bystrodvizhush-chegosfa tela. (On the visibility of a swiftly moving object.) Probl. fisiol. Optiki, 1947, 4, 108-116.—A formula for the perceived contrast of a moving object is theoretically derived and the value of one of the parameters determined experimentally by two methods.—I. D. London.

3030. Marg, Elwin, & Morgan, Meredith W., Jr. (U. California, Berkeley.) The pupillary near reflex; the relation of pupillary diameter to accommodation and the various components of convergence. Amer. J. Optom., 1949, 26, 183-198.—Pupillary diameters were determined from infra-red photographs made while observers were seated at a haploscope fixating targets under varied conditions. Retinal illumination was equated, using flicker thresholds. For the 5 subjects a linear relation appeared between PD and accommodation, and also between PD and accommodative convergence. The relation was also linear for the 2 observers who showed an effect of fusional convergence. A psychic proximal factor is also indicated. 25 references.—M. R. Stoll.

3031. Michaels, David D. (Chicago Sch. of Optometry, Ill.) Elements of color vision. Optom. Whly, 1949, 40, 1887-1891; 1903-1904.—Definitions and theories of color perception and color blindness are presented.—D. Shaad.

3032. Motokawa, Koiti. (Tohoku U., Sendai, Japan.) Physiological induction in human retina as basis of color and brightness contrast. J. Neuro-physiol., 1949, 12, 475-488.—Electrical excitability of the eye was investigated under weak light adaption following exposure to small patch stimulation. The increase in electrical excitability, expressed as a percentage (3) of the resting level, was always greater with successive presentation of black then white patch than with white alone. Simultaneous brightness contrast was demonstrated by greater ?values with simultaneous bright and dark patch presentation than with bright patch alone. Successive color contrast was demonstrated by a characteristic alteration of the excitability curve when a colored light preceded the white test-light. Data are reported which permit construction of a color triangle including hue and saturation.—C. E. Henry.

3033. Motokawa, Koiti. (Tohoku, U., Sendai, Japan.) Physiological studies on mechanisms of color reception in normal and color-blind subjects. J. Neurophysiol., 1949, 12, 465-474.-Using the method of electrical stimulation following the light stimulated dark adapted eye, the time constants of the basic retinal processes were determined in normal and deuteranomalous trichromats. In the fovea 3 processes at 590, 550 and 460 mu named the R, G and B processes were found. A new independent process Y with its maximum in the yellow spectrum was found in the periphery. Only 2 processes were found in the fovea of dichromats, one corresponding to the B process of trichromats and the other dependent on the type of color blindness; the R process was absent in the protanope and the G process was absent in the deuteranope.-C. E. Henry.

3034. Motokawa, Koiti. (Tohoku U., Sendai, Japan.) Retinal processes and their role in color vision. J. Neurophysiol., 1949, 12, 291-303.— These experiments report the effect of light on electrical threshold. When the dark adapted eye of man is stimulated by single 100 msec. pulses at 0.8-2.0 V. at varying intervals following brief periods of illumination there is found a period of supernormality lasting 2-10 secs. depending on the light intensity used. The "crest time" to maximal excitability is independent of brightness but is an inverse function of wave length. Data from normal and color-blind subjects suggest there are 3 kinds of retinal processes involved. Qualitatively similar results were obtained from the excised frog eye, with the temporal course extended over minutes. Inhibition for a specific color is found if the pre-illumination light is followed by stimulation with that color. Excitability is greatly reduced in the periphery. The fundamental events are thought to be in synaptic rather than photoreceptive structures.—C. E. Henry.

3035. Ogle, Kenneth N., & Triller, Wendell. (Mayo Clinic, Rochester, Minn.) Aniseikonia for distant and near vision. Amer. J. Ophthal., 1949, 32, 1719-1724.—Aniseikonic error at near is essentially the same as that measured for distance. 16 references.—D. Shaad.

3036. Pinegin, N. I. (Lenin State Optical Inst., Leningrad.) Krivasa absolsūtnoš kolbochkovoš chuvstvitel'nosti glaza v oblasti spektra ot $\lambda=302$ do $\lambda=950$ m μ . (The curve of absolute cone-sensitivity of the eye in the region of the spectrum from $\lambda=302$ to $\lambda=950$ m μ .) Probl. fisiol. Optiki, 1947, 4, 11–16. —Measurements of absolute cone-sensitivity to light from 302 to 950 m μ were made, establishing threshold illumination at the cornea in terms of ergs/sec. cm. The curve of sensitivity is maximal at about 550 m μ with cone-sensitivity to 302 m μ 600,000 times less than to 546 m μ ; to 950 m μ 1,100,000,000 times less than to 546 m μ .—I. D. London.

3037. Pinegin, N. I., & Bulanova, K. N. (Order of Lenin State Optical Inst., Leningrad.) Ostrota razlichenisa v zavisimosti ot kontrasta disa testob ektov: kolets Landol'ta, kvadratnykh figur i figur

samolèta. (The acuity of discrimination as a function of contrast for the test objects: Landdolt's circles, squares, and airplane shapes.) Probl. fisiol. Optiki, 1947, 4, 126–130.—Differences in shape of test objects as well as in brightness of background (with sufficiently high absolute level of the latter) have no essential influence on acuity of discrimination as a function of contrast. The average visibility ratio of threshold appearance of test object to threshold identification of its shape is about 3.—I. D. London.

3038. Quisenberry, S. W. (E. I. du Pont de Nemours & Co., Wilmington, Del.) Color conditioning. Optom. Wkly, 1949, 40, 1817–1819; 1822.—Psychological factors in color vision are discussed briefly.—D. Shaad.

3039. Ross, Sherman, & Mueller, C. G. (Bucknell U., Lewisburg, Pa.) A note on the memorization of color plates by a color deficient individual. J. gen. Psychol., 1949, 40, 269-274.—Both editions of the Pseudo-Isochromatic Color Plates of the American Optical Co. were tested for possible learning cues and techniques. One color-weak subject, after six hours study made relatively few errors even though he could not see the normal color content. He used association methods of learning, memorizing the proper response to the number he did see or to selected dots which served as cues. The first edition was easier to memorize.—B. R. Bugelski.

3040. Semenovskaîa, E. N. (Inst. Psychol., Moscow.) Rol'vnimanifa v izmenenii chuvstvitel'nosti organa zrenisa. (The role of attention in change of sensitivity of the visual organ.) Probl. fisiol. Optiki, 1947, 4, 148-168.—Voluntary attention in examining scarcely distinguishable objects under conditions of dark adaptation heightens sensitivity to light, depth, and contrast. Distraction of attention by weak knocking lowers peripheral sensitivity to light and decreases sharpness of depth perception. However, a weak sound heightens sensitivity to light during determination of visual thresholds under conditions of sustained attention. Attention in the visual sphere increases sensitivity in the auditory sphere, and vice-versa. Mental activity can heighten the excitability of the visual centers. Visual attention influences breathing and electrical resistance of the skin, thus demonstrating that the vegetative nervous system is involved. The action of attention is similar to that of adrenalin in that sensitivity to green is raised and sensitivity to red lowered. Overattending may lead to reduction of visual sensitivity. -I. D. London.

3041. Strughold, Hubertus. (Sch. Aviat. Med., Randolph Field, Tex.) The human time factor in flight; the latent period of optical perception and its significance in high speed flying. J. Aviat. Med., 1949, 20, 300-307.—The latent period of perception is the time between stimulation and the beginning of perception. For the eye, this period ranges between about 35 and 150 milliseconds. In supersonic flight—for example, at velocities equal to Mach number 3.0—the perceptual latent period produces a distance

scotoma of 100 meters. This means that when an object is "seen" 100 meters ahead, it is actually abreast of the eye. Other implications for supersonic flying are discussed.—A. Chapanis.

(See also abstracts 2992, 3325)

AUDITION

3042. Alexander, Irving E., & Githler, Fredrick J. (Princeton U., N. J.) The effects of jet engine noise on the cochlear response of the guinea pig. J. comp. physiol. Psychol., 1949, 42, 517-525.—Measurements of the cochlear response of guinea pigs exposed to 15 min. of jet-engine noise showed auditory impairment throughout the frequency range, with partial recovery up to 3 weeks following exposure. There is a lowered injury threshold even for moderately intense sounds following the exposure, and some evidence of continued degeneration up to 6 weeks after exposure. It is concluded that risk to auditory sensitivity is present in personnel exposed to jet engine noise.— L. I. O'Kelly.

3043. Bleeker, J. D. J. W. (Rijks U., Groningen, Holland.), & de Vries, Hl. The microphonic activity of the labyrinth of the pigeon Part I: The cochlea. Acta oto-laryng., Stockh., 1949, 37, 289-297.—Cochlear potentials in the pigeon are recorded with copper-wire electrodes. Maximum response obtained was about 120 microvolts. Equal-response contours for pure tones show maximum sensitivity at 2000 c.p.s. Auditory fatigue (viz., effect of pure tones on response to pure tones) discussed as well as the disturbing influence of bill movements.—I. J. Hirsh.

3044. de Vries, Hl. (Rijks U., Groningen, Holland.) Struktur und Lage der Tektorialmembran in der Schnecke, untersucht mit neueren Hilfsmitteln. (Structure and position of the tectorial membrane in the cochlea; investigated with new techniques.) Acta oto-laryng., Stockh., 1949, 37, 334-338.—New technique for observing the tectorial membrane in its proper place in the cochlea involves freezing petrous bone in liquid air. The thus brittle bone may be broken in pieces, all of the parts retaining their positions. Studies with polarised light and phase-contrast microscopy provide interesting information. In particular, the structure of the "Randfasernetz" is more easily observed. It is reported that this membrane normally covers the Hensen cells.—I. J. Hirsk.

3045. de Vries, Hl. (Rijhs U., Groningen, Holland.), & Bleeker, J. D. J. W. The microphonic activity of the labyrinth of the pigeon. Part II: The response of the cristae in the semicircular canals. Acta olo-laryng., Stockh., 1949, 37, 298-306.—With technique described previously (see 24: 3043), response of the crista in the ampulla of a semi-circular canal is measured. Maximum sensitivity on equal-response contours lies between 500 and 900 c.p.s. Destruction of cochlea does not eliminate "crista effect." Discussion includes fatigue effects similar to those for cochlear potentials as well as the possible

relation between the response of the crista to acoustic stimuli and the Tullio reaction.—I. J. Hirsh.

3046. Harris, J. Donald. (Medical Research Laboratory, Submarine Base, New London, Conn.) Some suggestions for speech reception testing. Arch. Otolaryng., Chicago, 1949, 50, 388-404.—Suggestions are made for improving tests of the ability to hear speech: reporting hearing deficit in terms of db. below normal rather than the distance of the speaker; use of a sound-level meter to aid testers in controlling their voice intensities, a microphoneamplifier-loudspeaker network to control intensities at the patient's ear, and a phonograph rather than microphone; and techniques for choosing stimulus words of homogeneous intelligibility as well as intensity.—A. C. Hoffman.

3047. Jongkees, L. B. W. (U. Utrecht, Netherlands.) Origin of the caloric reaction of the labyrinth. Arch. Otolaryng., Chicago, 1948, 48, 645-657.

—Theories of the cause and origin of the vestibular reactions to caloric stimulation are reviewed, with particular emphasis on the theory offered by Bárány. 46 references.—A. C. Hoffman.

3048. Jongkees, L. B. W. (U. Utrecht, Netherlands.) Value of the caloric test of the labyrinth. Arch. Otolaryng., Chicago, 1948, 48, 402-417.— Results on 60 normal medical students are used to evaluate the validity in oto-laryngological practice of the caloric test of vestibular functions.—A. C. Hoffman.

3049. Lindsay, J. R. (U. Chicago, Ill.), & Perlman, H. B. Otoneurology. In Spiegel, E. A., Progress in neurology and psychiatry, 1947, (see 24: 3261), 119-130.—In addition to the medical treatment of diseases of the ear there is a review of experimental papers dealing with air and motion sickness.—C. E. Henry.

3050. Popper, Otto. (U. Witwatersrand, Johannesburg, Union of South Africa.) Hydrodynamics and hearing: 1. The operative relief of otosclerotic and nonotosclerotic deafness and its relationship to a hydrodynamic hypothesis of hearing; a suggested explanation for (a) the intimate association of the organs of balance and the organ of hearing and for (b) the function of the incus. Arch. Ololaryng., Chicago, 1949, 49, 335-349.-The perilymph in the scalae vestibuli and tympani is regarded as a continuous fluid column (rigidly enclosed with mobile sealed ends) forming, with the ossicles, a perfect hydrodynamic system; thus, operative proceduree restore hearing by removing barriers to the mobile functioning of the hydrodynamic system. The stapes accommodates excursions of the perilymph and protects the organ of Corti from injury; the functions of the incus are to poise and center the capitulum of the stapes so that movement is restricted to a prescribed orbit, to oppose the tonus of the stapedius muscle, and to support the articular surface of the head of the malleus; the malleus is involved in adjusting the tension of the tympanic membrane. The organs of hearing and of balance

are related in that both respond to pressures.—A. C. Hoffman.

3051. Theilgaard, Ejner. (Odense Town & County Hosp., Varde, Denmark.) Testing the organ of hearing with special reference to noise prophylaxis. Acta oto-laryng., Stockh., 1949, 37, 347-354.—Author describes a further attempt to develop a short-time test for predicting a man's ability to resist the noxious effects of loud noise on his hearing. Although this goal was not attained, data are presented on the fatigue produced by pure tones as measured by the elevation in the threshold of the same tones or tones at higher frequencies. Most frequent maximum effect occurs at frequency one-half octave above tone used to fatigue. Large differences from one individual to another and also from one ear to the other in the same individual.—I. J. Hirsh.

(See also abstract 2906)

RESPONSE PROCESSES

3052. Aronson, Lester R. (Amer. Museum Natural History, New York.) An analysis of reproductive behavior in the mouthbreeding cichlid fish, Tilapia macrocephala (Bleeker). Zoologica, N. Y., 1949, 34, 133-158.—After a qualitative description of the courtship and reproductive behavior of the Tilapia hypotheses are advanced to account for the findings. This fish is of interest to the student of sexual behavior because of its elaborate pattern of courtship, mating and parental care and because "there are no distinct qualitative differences between male and female in their sexual activities." The present investigation showed that quantitative differences do exist in the frequency of performance by the two sexes of various parts of the reproductive pattern. 78-item bibliography.—L. I. O'Kelly.

3053. Beach, Frank A., & Holz-Tucker, A. Marie. (Yale U., New Haven, Conn.) Effects of different concentrations of androgen upon sexual behavior in castrated male rats. J. comp. physiol. Psychol., 1949, 42, 433-453.—After preliminary mating tests, 52 male rats were castrated and divided into groups receiving injections of various concentrations of testosterone propionate, the amounts varying from 1 to 500 micrograms per day. Dosages of less than 50 micrograms produced little change in mating behavior, the animals so treated being "less likely to show any sexual responses toward the female than were normal animals or other castrates given higher concentrations of male hormone." Castrated animals injected with 100 to 500 micrograms of testosterone exhibited accelerated sexual behavior equal to or superior to their pre-operative level.—L. I. O'Kelly.

3054. Bonaparte, Marie. De la sexualité de la femme. 2me partie. La fonction érotique, fonction biopsychique. (Female sexuality. Second part. Erotic and biopsychological functions.) Rev. franç. Psychoanal., 1949, 13, 161-227.—Part 1, (24: 1654), psychology as a branch of biology, summarizes the importance of a mutual interaction. Part 2, the

female and her libido, describes the lesser richness of the female libido and the fundamental obstacles in erotic adjustment; psycho-physiologic "vitellinism" in the woman; the triple stratification of the determination of female frigidity. Part 3, adults and the child, reviews the contradictory attitude of the adult to infantile sexuality and sexual thinking in the child. Part 4, on essential feminine masochism, discusses the respective relationships of the active and passive oedipus complexes to sadism and masochism; the mechanisms of the Freudian fantasy of beating a child or a woman; female sexual types. Part 5, the formative role of the man in female sexuality, by the device of algebraic formula evaluates the psychological effects of several types of erotic initiation.—

G. Rubin-Rabson.

3055. Canfield, A. A., Comrey, A. L., & Wilson, R. C. (U. Southern California, Los Angeles.) A study of reaction time to light and sound as related to increased positive radial acceleration. J. Aviat. Med., 1949, 20, 350-355.—Simple reaction times to light and sound were measured for 16 subjects when they were exposed to positive acceleration forces of 1, 3 or 5 g. Reaction times to the sound were shorter than to the light. Both kinds of reaction time increased significantly when the subjects were tested under increased g. Correlations between reaction times under the various experimental conditions are all high and positive. Suggestive correlations between speed of reaction and several psychological tests are reported.—A. Chapanis.

3056. Craig, David R. (Indiana U., Bloomington.) Effect of amplitude range on duration of responses to step function displacements. Dayton, O.: U. S. Air Force, Air Materiel Command, Wright-Patterson Air Force Base, 1949. iii, 9 p. (AF Tech. Rep. No. 5913.)-"Two groups of 25 subjects each tracked a point which moved with step function displacements of varying amplitudes. . . . Response duration, expressed as Peak Time, was measured from the stimulus displacement to the initial peak of the response movement. Within each range Peak Time increased with the increase in stimulus displacement amplitude. However, the increase was not continuous over the two ranges, the mean Peak Time of responses to 1 inch displacements being significantly shorter for Group II than for Group I. This systematic variation in Peak Time (indicating non-linearity in the system) may be tentatively accounted for by assuming a complex input consisting of a component which is a function of preceding inputs and a component equal to the difference between the amplitude of the first component and the amplitude of the presented displacement."-M. W. Raben.

3057. Edwards, Austin S. (U. Georgia, Athens.) Attention and involuntary movement. J. appl. Psychol., 1949, 33, 503-509.—Finger tremor, as measured by Edward's finger tremometer, was used as involuntary movement. When attention was fixed, no significant increase in finger movement resulted under distracting and disturbing conditions. With shifting attention and slight distraction, the

increase in involuntary movement was large, consistent, and statistically significant. Implications of these results for occupational placement and one arm automobile driving are suggested.—C. G. Browne.

3058. Ellson, Douglas G., Hill, Harris, & Craig, David R. (Indiana U., Bloomington.) The interaction of responses to step function stimuli: II. Equal opposed steps of varying amplitude. Dayton, O.: U. S. Air Force, Air Materiel Command, Wright-Patterson Air Force Base, 1949. iii, 15 p. (AF Tech. Report No. 5911.)—By determining the extent to which the responses of the operator-apparatus combination to superimposed inputs conform to the responses of a linear system to such inputs, information on the linearity of operator performance in a direct tracking situation was obtained. results indicate that the mean response of the operator-apparatus combination to a pair of opposed step inputs conforms to the requirements of a linear system for all amplitudes tested. The relation between mean responses to single steps of different amplitudes, however, does not fulfill the requirements of linearity.- M. W. Raben.

3059. Pilgrim, Francis J. (U. Pittsburgh, Pa.), & Patton, R. A. Production and reversal of sensitivity to sound-induced convulsions associated with a pyridoxin deficiency. J. comp. physiol. Psychol., 1949, 42, 422-426.—"A pyridoxin deficiency was produced in suckling rats by feeding a deficient diet to the mother. The young rats were continued on the deficient diet after weaning. The animals exhibited a high incidence of sound-induced convulsive seizures. These could be prevented by injection of vitamin B₆. Middle ear infection, which may be a complicating factor in sound-induced seizures, was at a minimum and the incidence was determined by autopsy and examination of the middle ear cavity after completion of the experiments."—L. I. O'Kelly.

3060. Plottke, Paul. Über Linkshändigkeit. (On left-handedness.) Int. Z. Indiv. Psychol., 1948, 17, 177-178.—A "relative organ inferiority" such as left-handedness can be a liability or, if compensated for, an asset. The character of the individual, not heredity or environment, is the decisive factor in determining the adjustment. The education of the left-handed child should aim to develop "courage"

and a true social feeling.-C. T. Bever.

3061. Riess, B. F., Ross, Sherman; Lyerly, S. B., & Birch, H. G. The behavior of two captive specimens of the lowland gorilla, Gorilla gorilla gorilla (Savage & Wyman). Zoologica, N. Y., 1949, 34, 111-118.—The writers summarize behavior observations made daily, using a standardized check list, of an 8-year old female and 10-year old male gorillas housed in the New York Zoological Park. These observations are compared with a similar study made on gorillas in another zoo. A list of the locations and individual physical characteristics of gorillas in captivity in the United States is presented.—L. I. O'Kelly.

3062. Stone, Calvin P., & Walker, Alan H. (Stanford U., Calif.) Note on modification of effects

of electroconvulsive shocks on maternal behavior by ether anesthesia. J. comp. physiol. Psychol., 1949, 42, 429-432.—Previous studies have shown the disruptive effects of electroshock convulsion on maternal behavior if given from midway in pregnancy to shortly after parturition. This article reports preliminary data indicating that ether anesthesia during the time of administering the electroshocks "affords complete or almost complete protection against the deleterious effects of a series of convulsive shocks from the 12th day of pregnancy to the first day after parturition."—L. I. O'Kelly.

COMPLEX PROCESSES AND ORGANIZATIONS

3063. Adams, Jack A. (State U. Iowa, Iowa City.) The evaluation of 'difficulty of task' under several different conditions of performance on the modified Mashburn apparatus. Port Washington, L. I., N. Y.: U. S. Navy, Special Devices Center, 1949. 27 p. (Tech. Rep.-SDC 57-2-8.)—6 groups, each composed of from 15 to 18 male students, performed on one of six tasks. A general index of difficulty (G.I.D.) was computed. These values provided a seemingly reliable basis for rating the six tasks in relative difficulty. It could be shown that the maximum amount of positive transfer from habitual modes of response was operating for the easiest task and that the maximum amount of negative transfer was operating for the two most difficult tasks. However, it was indicated that the difficulty of psychomotor tasks such as these cannot be inferred reliably from suppositions concerning transfer.—M. W

3064. Berge, Claude. Le symbolisme des couleurs. (The symbolic meaning of color.) Psyché, 1949, 4, 529-534; 658-662.—These are the first two of three articles discussing the symbolic meaning of several colors.—G. G. Besnard.

3065. Choisy, Maryse. Le bovarysme de l'idéal du moi et de la libido narcissique. (The bovarysm of the ego and the narcissistic libido.) Psyché, 1949, 4, 562-580.—An expose of the Freudian and the Adler-Nietzsche concept of the ego and the narcissistic libido as they are affected by the constant swing between dreams and reality or "bovarysm."—G. G. Besnard.

3066. Choisy, Maryse. Phallocratie. (Phallic symbolism.) Psyché, 1949, 4, 450-490.—Biological science has brought new light on bisexuality since Freud's original writings. The "desire for maternity" in the male is at least as great as the "desire for masculine anatomy" in the female. During the last few decades we have come to recognize that women play a role as aggressive as men.—G. G. Besnard.

3067. Horney, Karen. Inhibitions dans le travail. (Inhibitions in work.) Psyché, 1949, 4, 581-595.—A discussion of certain failures in creative work which originate in neuroses. Four principal factors are indispensable to creative work—talent or apti-

tude, perseverance, self-confidence, and interest toward the work. Each factor is analyzed in detail. The author concludes that inhibitions due to neuroses constitute a waste of human energy and the necessity of combating neuroses is indeed very great.—G. G. Besnard.

3068. Naesgaard, Sigurd. Nature et origine de la jalousie. (Nature and origin of jealousy.) Psyché, 1949, 4, 513-528.—The source of jealousy is not to be found in infidelity but has a sexual beginning. The root of the disease lies in mental upheavals which have come in conflict with the natural manifestations of the soul and instincts of the individual.—G. G. Besnard.

3069. Oppenheimer, Oscar. (Central Michigan Coll. Educ., Mt. Pleasant.) The structure of the mind. J. gen. Psychol., 1949, 40, 247-259.- Motives are the backbone of the structure of the mind. They account for the functioning of the mind as a whole. Drives and emotions are partial substitutes for motives. Intelligence and perception are tools for realizing motives. Motives operate on three levels: the egotistic, altruistic, and scientific curiosity. Egotistic motives are self-evident. Altruistic motives are testified to by conscience. "We are altruistic because our altruistic motives are based on the motive to please God." Altruistic and scientific motives are on a higher value level than are egotistic motives because they are based on religious motives. A distinction is drawn between altruistic deeds and altruistic motives, and explanations are presented concerning their existence and activity in opposition to common negative arguments.-B. R. Bugelski.

3070. Sperling, Otto B. On the mechanisms of spacing and crowding emotions. Int. J. Psycho-Anal., 1948, 29, 232-235.—By means of illustrative cases a mechanism is described where "out of fear of an excess of emotion, the affect is subdivided and the parts experienced at different times" analogous to two-or-more stage surgical operations. A similar crowding of emotions into one simultaneous climax is also reported. Subdividing and spacing is said to be a mechanism of the death instinct and crowding a manifestation of Eros.— N. H. Pronko.

3071. Urban, Hubert J. Psychiatrie et parapsychologie; le test E.S.P. (Psychiatry and parapsychology; the E.S.P. test.) Psyché, 1949, 4, 615-625.—The opinion of many psychiatrists on parapsychology has changed a great deal in the last 10 years and this new science is becoming more and more accepted. The E.S.P. test is discussed in some detail. Some results of the E.S.P. test obtained from mental patients are given—the results do not differ from those obtained on a normal population. The author shows, however, that a remarkable increase in correct responses occurs in mental patients after either shock therapy or narcoanalysis. A mention is made of the PK test.—G. G. Besnard.

LEARNING & MEMORY

3072. Heron, W. T. (U. Minnesota, Minneapolis.) Internal stimuli and learning. J. comp. physiol.

Psychol., 1949, 42, 486-492.—Six male albino rats were trained in a brightness discrimination box to go to the light side for food and to the dark side for water. They were made hungry or thirsty in a random order. By 732 water-deficient trials and 614 food-deficient trials the animals were making correct choices well above chance levels. They were then run while both hungry and thirsty; under this condition 100% of choices were to the food side. When run satiated, 92% of choices were towards water. Finally, after 48 hours without food or water, 51 cc. of water was introduced by tube into the stomachs of 4 animals. Choices were 100% to the water side. The writer concludes that the animals were responding to "stimuli from a full versus a partially full stomach." The significance of these findings for interpretation of the Hull-Leeper experiments is discussed.—L. I. O'Kelly.

3073. Kendler, Howard H., & Mencher, Helen Chamberlain. (New York U.) Variables in spatial learning. II. Degree of motivation during training and test trials. J. comp. physiol. Psychol., 1949, 42, 493-501.—Rats with 6 and 21 hours of food deprivation were trained on a single-unit T-maze with noncorrection technique to 20 reinforcements. On the day following achievement of this criterion each animal was placed in the starting box, but was faced with the openings of 6 radiating paths, one of which led directly across the stem-arm angle of the T to the appropriate reward box. The door to the stem of the T was blocked. Each animal was run in this situation for 20 trials, half under the same motivation as in original learning, half under the opposite motivation. Results for all animals, both on the initial test trial and for the test series showed less than chance choice of the pathway leading directly to the goal box. It is concluded that motivational differences do not affect the degree of spatial learning.-L. I. O'Kelly.

3074. Konorski, Jerzy. (U. Lods, Poland.) Conditioned reflexes and neuron organization. New York: Cambridge University Press, 1948. xiv, 267 p. \$4.00.—The aim of the book is to bridge the gap between the conceptions based on the work of Sherrington and those based on the work of Pavlov. Pavlov's views are given, and then criticized. Among the principles accepted in explanation of conditioning phenomena are: (1) impulses exerting excitatory or inhibitory effect on the nerve cells they reach are conveyed through different pathways, (2) the cerebral cortex not only transmits nervous impulses, but also creates new paths over which they may travel, by way of synaptic modification, (3) synaptic modification atrophies with disuse, (4) internal inhibition (as in extinction) results in synaptic connections of an inhibitory character, independent of existing excitatory connections. Most of the discussion is devoted to conditioned reflexes of the first type (i.e., classical conditioning), although there is one chapter on conditioned reflexes of the second type (i.e., instrumental conditioning). -E. R. Hilgard.

3075. Meyer, Donald R., & Harlow, H. F. (U. Wisconsin, Madison.) The development of transfer of response to patterning by monkeys. J. comp. physiol. Psychol., 1949, 42, 454-462.—"Eight monkeys trained to respond to oddity-principle patterning with one group of stimulus objects were subsequently tested on a long series of transfer problems involving the same patterning but different stimuli. Performance on transfer problems involving stimuli differing markedly from the training stimuli begins at a chance level and gradually and significantly improves. This continuous, negatively accelerated improvement represents the development of a learning set to respond to patterning, a set which can develop in the absence of common stimulus dimensions. The discriminability of stimulus-objects produces a constant effect throughout the development of the patterning learning set."—L. I. O'Kelly.

3076. Mowrer, O. Hobart. (U. Illinois, Urbana.) On the dual nature of learning—a re-interpretation of "conditioning" and "problem-solving." Harv. educ. Rev., 1947, 17, 102-148.—There is sufficient evidence now available to warrant redefining conditioning and problem-solving in rather special ways so that learning will be seen to consist of two basic processes, associationism and hedonism. A completely monistic explanation seems to be impossible. We should probably refer not to "the learning process," but to two such processes. This is not, however, a renewal of the "vicious convenience" of using both the laws of effect and exercise, since these latter two principles were ordinarily applied to the same learning process. In the current formulation, which was made fairly explicit by Skinner a decade ago, conditioning—the acquisition of secondary drivesis related to the autonomic nervous system, problemsolving-the reduction of primary or secondary drives—to the central nervous system.—J. C. Stanley.

3077. Rohrer, John H. (U. Oklahoma, Norman.) A motivational state resulting from non-reward. J. comp. physiol. Psychol., 1949, 42, 476-485.— Following preliminary training, 2 groups of albino rats were given 60 reinforced acquisition responses in a modified Skinner apparatus under a 22-hour hunger motivation. Both groups were then given an extinction series, one group receiving non-rewarded trials at 10 sec. intervals, the other at 90 sec. intervals. The group with the 10 sec. interval showed aignificantly greater response latency. A second extinction series was given to both groups, but with a common inter-trial interval of 50 sec. and to a 30-sec. non-response criterion. The group with the shorter inter-trial interval in the first extinction series reached the second extinction criterion in significantly fewer trials. The writer discusses the significance of his findings for conditioning theory and for psychopathology.—L. I. O'Kelly.

3078. Schiller, Paul H. Analysis of detour behavior. I. Learning of roundabout pathways in fish. J. comp. physiol. Psychol., 1949, 42, 463-475.—Using 7 Gambusia affinis and 2 Notropis nocomis, both fresh

water minnows, it was found that detour pathways could be readily established in 20-30 trials, even when the barriers were of varied location, size and shape. Qualitative analysis of the movement patterns of the fish failed to show evidence of movement selection in terms of "effect, perception of relations . . . or . . . symbolic processes." Rather, the writer believes detour behavior to be "a composite sequence of responses, an operant ready to be emitted as a pattern of pathway in various spatial positions and magnitudes, as a quasi-primary reaction. . . . Actual situational factors are therefore more decisive than the retention of previous experiences."—L. I. O'Kelly.

3079. Siegel, Paul S., McGinnies, Elliott M., & Box, Jane C. (U. Alabama, University.) The runway performance of rats subjected to electroconvulsive shock following nembutal anesthesia. J. comp. physiol. Psychol., 1949, 42, 417-421.—After training on an 18-foot straightaway 10 albino rats were injected with an anesthetic amount of nembutal and then subjected to one electroshock. After 81 hrs. they were again run on the straightaway. Control groups of 8 and 6 animals were used, the former receiving electroconvulsive shock after injection of physiological saline, the latter receiving nembutal but no electrochock. The saline-shock group showed a post-shock increase in running time; neither the shock-nembutal nor the nembutal groups were affected. "It was concluded that anesthesia protects the animal from the disturbing effects of electroconvulsive shock. Such disturbances seem dependent upon the occurrence of convulsion and not upon passage of current as such."—L. I. O'Kelly.

3080. Twining, Wilbur E. (U. California, Berkeley.) Mental practice and physical practice in learning a motor skill. Res. Quart. Amer. Ass. Hlth, 1949, 20, 432-435.—A study of "the statistical significance of the difference in the learning of a motor skill through mental practice as differentiated from physical practice." Subjects were 3 groups of 12 college men. The first group pitched 210 rope rings at a peg 10 feet away, this was repeated 22 days later. The second group threw 210 rings on the first day, 70 practice rings each day thereafter and 210 again on the 22nd day. The third group threw 210 rings on the first day, mentally rehearsed this first day's activities for 15 minutes a day through the 21st day, and on the 22nd day pitched 210 rings again. The results revealed that the first group showed no significant learning. The group with physical practice improved 137% and the third group (mental practice) improved 36%. In both the latter groups the improvement was statistically significant.—M. A. Seidenfeld.

THINKING & IMAGINATION

3081. Cunningham, G. Watts. (Cornell U., Ithaca, N. Y.) On the meaningfulness of vague language. Phil. Rev., N. Y., 1949, 58, 541-562.—Cunningham raises the question as to whether vague language can be meaningful and if so under what

conditions. Because vague language is often the only functionally available language Cunningham concludes that "vague language qua vague must be said to be meaningful." The author accepts only with important reservations "that language becomes more meaningful as it grows in precision." Philosophically Cunningham is committed to the view that "making language precise exhibits its meaning more clearly" but this view should not be assumed to be identical with making it more meaningful.—M. A. Seidenfeld.

3082. Lazerowitz, Morris. (Smith Coll., Northhampton, Mass.) Are self-contradictory expressions meaningless? Phil. Rev., N. Y., 1949, 58, 563-584.

—A discussion of both sides of the philosophical problem on the semantic implications of "self-contradictory" and "meaning." The author concludes that there is perhaps a universal mystical craving in mankind which culminates philosophically in the theory that "self-contradictions have inconceivable meanings."—M. A. Seidenfeld.

3083. Lewin, Bertram D. Inferences from the

3083. Lewin, Bertram D. Inferences from the dream screen. Int. J. Psycho-Anal., 1948, 29, 224-231.—The dream screen, defined as the blank background upon which the dream picture appears to be projected, demonstrates that remembering or forgetting dreams is not solely a matter of "form" but of "content" as well. These and other dynamisms are analyzed out of numerous cases from clinical and literary sources.— N. H. Pronko.

3084. Ostow, Mortimer. (50 E. 78th St., New York 21, N. Y.) Entropy changes in mental activity. J. nerv. ment. Dis., 1949, 110, 502-506.— By introducing orderliness into a chaotic situation, thought may cause a diminution in entropy. Calculation of such entropy change and the related energy change shows that even at very low efficiencies, the metabolic requirements of thinking are almost unmeasurably low in the presence of other somatic activities. It is inferred that availability of energy is not a limiting factor in amount or complexity of thinking. Diminution of oxygen or glucose impairs mental activity through a deterioration of the labile mechanism that permits formation and manipulation of thoughts rather than through an inadequate supply of energy for the thinking process.— N. H. Pronko.

3085. Sumner, F. C. (Howard U., Washington, D. C.) Sudden lapses of viewpoint on the part of Titchener and Szymanski in their exposition of concept-formation. J. gen. Psychol., 1949, 40, 267-268.—Titchener is alleged to have deviated from his "content" to an activism in his treatment of concepts. He gives the mind a dynamic role in the process of abstraction. Szymanski, on the other hand, leaves a dynamic psychology for a static content in basing his notions of concepts on frequency of experience which results in a cumulative mental image.—B. R. Bugelski.

INTELLIGENCE

3086. Burt, Cyril. (U. Coll., London, Eng.) The structure of the mind; a review of the results of

factor analysis. Brit. J. educ. Psychol., 1949, 19, 176-199.—The evidence for the existence of cognitive group factors at the "intermediate or associative level of mental life" and the "higher relational level" is examined, together with that bearing upon the reality of general processes affecting mental activity at every level. The evidence points to a hierarchy comprising a general factor, and a small number of broad group factors, subdivided into narrower group factors, with the whole series arranged on successive levels; the factors on the lowest level are most specific and most numerous.—R. C. Strassburger.

3087. Burt, Cyril. (U. Coll., London, Eng.) The two-factor theory. Brit. J. Psychol., Statist. Sect., 1949, 2, 151-179.—It is pointed out that Spearman's "two factor theory" was derived quite as much from current psychological assumptions as from statistical data, and must, therefore, be examined from the former standpoint as much as from the latter. Spearman contended that with an improved statistical procedure, it would be possible to prove the all-sufficiency of what Galton had termed "general ability" and the absence of anything like "special abilities" in the original sense of that phrase. The novel feature in his procedure consisted not in "factor analysis" as now understood, but in a method which is more similar to the so-called "canonical analysis."—G. C. Carter.

3088. Garcia de Onrubia, Luis Felipe. Ensayo sobre la teoria de la inteligencia de Spearman. (A treatise on the theory of intelligence by Spearman.) Buenos Aires: Instituto de Filosofía de la Facultad de Filosofía y Letras, Universidad de Buenos Aires, 1949. 114 p.—An historical introduction to the present crisis in psychology, i.e. its status as a science leads to an examination of Spearman's two factor theory of intelligence. Of chief concern is Spearman's use of the concept of "psychic energy." Similarities and differences in the use of the concept by other scientists are shown by the author to have a different meaning from that which Spearman advocates and attributes to them. The conclusion reached is that Spearman's psychological position does nothing to resolve the crisis in psychology for it rests on a purely mechanistic basis.—S. Yudin.

(See also abstract 3106)

PERSONALITY

3089. Carlsson, Gösta. Personlighetspsykologiens mål och metoder. (The goal and methods of personality-psychology.) In Sjöstedt, C. E., Problem i den moderna psykologien. (See 24: 2903), 70-86.— A fundamental problem, according to Carlsson, is to distinguish between personality-psychology and social psychology: ". . . perhaps one may conceive of personality-psychology as a branch of social psychology." After briefly defining the concepts of endowment, temperament, character, and personality, various personality tests are described including: Terman's M-F test, the Rorschach and T.A.T., Spranger's values test, etc.—A. Tejler.

3090. Nobre de Melo, A. L. A estrutura da personalidade primitiva. (The structure of primitive personality.) Rev. Centro psiquiatr. nac., Rio de J., 1946, 1, 27-32.—Certain essential characteristics of primitive mentality are present in children, savages, and schizophrenics. Even in the normal civilized adult certain ancestral mechanisms become actual through the process of regression. Of this type we have magic thought, dreams, eidetism, or expressionist art. The concept of biologic dynamism applied to mental pathology would indicate that it is impossible to understand psychologically, schizophrenia, conceived as extreme personality regression, without a knowledge of the structure of primitive personality.—A. Manoil.

3091. Pende, Nicola. La scienza moderna della persona umana. (Modern science of human personality.) Milano: Garzanti, 1947. 432 p.—The author presents and develops the thesis that human personality must be studied from the point of view of science, philosophy, and religion if it is to be understood fully. In accordance with orthodox Thomistic viewpoint, man is regarded as a unity of the body and the soul (corpo e spirito). He shares the organic part of his being with the vegetative and animal forms of life. His affectivity (thymopsyche) is also influenced by the organic (and inorganic) factors. Only rationality (noopsyche) and will are truly human characteristics, free from the bonds of physico-chemical determinism. Applications of the science of human personality to medicine, education, and political theory are briefly considered.—A. Sidlauskas.

3092. Thornton, Francis B. How to improve your personality by reading. Milwaukee: Bruce Publishing Co., 1949. xii, 241 p. \$2.50.—This series of popular discussions is designed to stimulate the reader toward acquainting himself with good and great literature. The chapters deal with books, the book and the reader, the novel, the Catholic novel, poetry, autobiography and biography, history, the drama, science, philosophy, religion, and reading and the personality. An extensive reading list (33 pages) of books covering topics discussed follow the discussion chapters. The final section gives the St. John's College list of the hundred best books. Improving the personality through reading is to be attained by gaining appreciation of good books and thus broadening one's culture, information and usefulness as a member of society.—M. A. Tinker.

3093. Winthrop, Henry. Two concepts of personality disintegration: I. Attitude-inconsistency as failure to order values; II. Schizophrenic disturbances of thinking as failure to order meanings. J. gen. Psychol., 1949, 40, 177-218.—The author answers criticisms and comments on suggestions arising from a previous paper on the measurement of the consistency of attitudes. Gestalt and psychoanalytic arguments are criticized and the logic of deducing personality disintegration from logical inconsistency in endorsing opinion statements is explained, analyzed, and supported.—B. R. Bugelski.

AESTHETICS

3094. Arnheim, R. (Sarah Lawrence Coll., Bronxville, N. Y.) The priority of expression. J. Aesthet., 1949, 8 (2), 106-109.—Arnheim contrasts the traditional with the gestalt conception of expression. He favors the gestalt doctrine which holds expression to be primary, and what Werner has called the "geometric-technical" qualities of sensory data to be secondary responses. The article ends with an application of his theories to the teaching of the arts.—P. R. Farnsworth.

3095. Epstein, Jean. Cine-analyse ou poesle en quantite industrielle. (Motion picture-analysis or production-line poetry.) Psyché, 1949, 4, 651-657.

Literature, theater, painting, music, and the arts in general have the ability to let man lose himself in thought and perhaps self-analyse himself. The arts are restricted to a few, however, but movies are available to nearly everyone, and this production-line "poetry" is a powerful medium for self-analysis.

G. G. Besnard.

3096. Michelis, P. A. Space-time and contemporary architecture. J. Aesthet., 1949, 8 (2), 71-86.

Modern architecture is essentially utilitarian. The theory behind it does not start from an ideological position but attempts to make use of all science has to offer. Modern art attempts to arouse the imagination, "to transport it—to the space-time of dream vision."—P. R. Farnsworth.

DEVELOPMENTAL PSYCHOLOGY

3097. Sjöstrand, Wilhelm. Utvecklingspsykologi. (Developmental psychology.) In Sjöstedt, C. E., Problem i den moderna psykologien. (See 24: 2903), 105-125.—Part one of this article contains sections on developmental psychology and pedagogical aims; the instinct concept; endogenous and exogenous factors; and twin studies. Part two deals with the increasing importance of child psychology; methodological differences; significant factors in the variable onset of puberty; the influence of the endocrine system; physical development during puberty; intellectual development during adolescence; puberty as a conflict situation; introversion and extraversion; and the implications of developmental psychology for a better world.—A. Tejler.

CHILDHOOD & ADOLESCENCE

3098. Baruch, Dorothy W. How to discipline your children. Publ. Affairs Pamphl., 1949, No. 154. 31 p.—This brief pamphlet summarizes the methods by which children may be disciplined in a manner which satisfies the parents and at the same time fits the child. The author discusses "what makes the child 'naughty'" and the causes of "bad" feelings in the child. Baruch stresses the role of love, frankness in-the parent-child relationship, and a willingness to understand the child as powerful preventive factors in avoiding misconduct in the child. The parental role in helping the child understand himself and find expression for pent-up emotions is discussed. A

reading list of books and pamphlets for the parent is included.—M. A. Seidenfeld.

3099. Bergeron, Marcel. Esquisse du développement moteur chez l'enfant au cours des dix premiers mois. (A sketch of the motor development of the child in the course of the first ten months.) Enfance, 1948, 1, 256–261.—Henri Baruk's sketch of the motor development of the child during the first ten months—originally published obscurely—is here reproduced for a larger circle of investigators. It is then compared at each age with the findings of the most reputed investigators in this field: André Collin, E. Pichon, Gourevitch, Wallon, Gesell, and with the author's own observations.—F. C. Sumner.

3100. Bossard, James H. S. (U. Pennsylvania, Philadelphia.) Social change in the United States. Ann. Amer. Acad. polit. Soc. Sci., 1949, 265(Sept.), 69-79.—The impact of social change upon the school child is the theme of this article. The following problems unknown in earlier societies are considered pressing ones for the present-day educator: (1) the confused adolescent living in a world of heterogeneous and conflicting ethics, (2) the child spoiled by the too-sma family, (3) the child neglected by the modern professional woman, (4) the delinquent child from the broken home, (5) the uprooted child in a constantly moving population, (6) the child overexcited by the ever-increasing bombardment of stimuli from the radio, movies, television, etc. author looks upon these developments as difficult and challenging but possible of ultimate solution.-L. A. Noble.

Angeles.) Abriss der Geistigen Entwicklung des Kindes. (Outline of the mental development of the child.) (7th ed.) Heidelberg: Quelle & Meyer, 1949. 180 p. DM 5.90.—Designed as a reference handbook, this 7th edition of Bühler's outline represents a condensed review of his volume, The mental development of children, originally published in 1918. An English translation of the 5th edition appeared in 1930 (See 5: 680). In a chapter on general considerations, the author discusses comparative psychology, inheritance of intellectual qualities, aims and methods of child psychology, and the physical development of the child. In subsequent chapters, he deals with the first year of life, the development of perception, memory, phantasy, concept formation, social behavior, and drawing ability. A brief bibliography follows each chapter.—H. P. David.

3102. del Solar, Charlotte. Parents and teachers view the child; a comparative study of parents' and teachers' appraisals of children. New York: Bureau of Publications, Teachers Coll., Columbia U., 1949. x, 119 p. \$3.00.—36 children representing equally Grades 1-6, with a mean IQ of 128, were the subjects. Interviews with parents and teachers provided descriptions and appraisals of the children from their respective viewpoints, while interviews with the children revealed their attitudes toward certain aspects of home and school relationships. Areas of

agreement respecting "satisfying" qualities in the children were found in personality characteristics, intellectual abilities, relationships with people, and artistic interests. "Problems" frequently reported by both parents and teachers were the unfavorable aspects of these same traits. There was evidence of distinctive interest and concern in a group of qualities stressed by parents but not by teachers.—R. C. Strassburger.

3103. Edmiston, R. W. (Miami U., Oxford, O.), & Baird, Frances. The adjustment of orphanage children. J. educ. Psychol., 1949, 40, 482-488.—The California Test of Personality was given to 1058 children in 8 orphanages, and to 207 pupils in Xenia, O. public schools. Among orphanage groups, attendance at public schools rather than instruction within the home tended to give better self-reliance but less feeling of belonging. In general, the adjustment of orphanage children was below that of other public school children, and tended to become less adequate with duration of stay in the home, especially after 8 years. Adjustment varied somewhat in relation to which, if either, parent was alive.—E. B. Mallory.

3104. Gans, Roma. (Columbia U., New York.) John Dewey and the understanding of children. Teach. Coll. Rec., 1949, 51, 136-138.—One measure of the civilization of people is the place of children in the culture. As early as 1898, Dewey came to their defense as thinkers with their own ideas, capable of making value judgments, able to synthesize from their experiences and ready to share in maintaining and changing the social scene where needed. He conceives of the child as an organic whole, intellectually, socially and morally, as well as physically, to be taken as a member of society in its broadest sense. A premature demand upon abstract intellectual capacity stands in its own way and cripples rather than furthering his intellectual development.—G. E. Bird.

3105. Gesell, Arnold. (Yale U. Sch. Med., New Haven, Conn.) The clinical supervision of child development. Wis. med. J., 1949, 48, 119-123.— The Developmental Schedules permit the experienced examiner to draw up a descriptive characterization of a child's maturity status in terms of his age and give a scientific basis for the clinical supervision of the early child development.—F. C. Sumner.

3106. Gilliland, A. R. (Northwestern U., Evanston, Ill.) Environmental influences on infant intelligence tests scores. Harv. educ. Rev., 1949, 19, 142-146.—Analysis of the factors that influence the Northwestern Infant Test scores, based on 407 institutional children and 237 clinic infants, indicates that (1) in biologically healthy infants, socioeconomic status of parents has little or no influence on test scores, and (2) infants with variable social stimulation have higher scores than infants without social contact. A wholesome and stimulating psychological and social environment—starting at birth—is essential to the children's maximum mental development.—A. R. Schmidt.

3107. Graber, Gustav Hans. The mental life of the child. New York: Staples Press, 1949. 158 p. \$2.00,—A Swiss psychoanalyst's suggestions on education as a search for "the deepest self," and discussion of such issues as aggression, fear, sexual needs, dreams, etc., on the basis of illustrative excerpts from the author's cases of deep analysis of children.—L. J. Stone.

3108. Hunter, T. A. A. The "delicate" adolescent. Practitioner, 1949, 162, 275-279.—The adolescent characterized as "delicate" is one who without a diagnosis of any specific disease is considered unfit physically to live the full active life of adolescence. While lay circles tend to blame the chronic subnormal health of the adolescent upon malnutrition, there appears poor basis in fact for this belief even with current rationing in Britain. Cardiac vascular affections may possibly have something to do with the condition. From the psychosomatic standpoint, the condition may be resultant of a subconscious desire on part of child and parent for a prolongation of infantile dependency.—F. C. Sumner.

3109. Illingworth, R. S. (U. Sheffield, Eng.), Harvey, C. C., & Gin, Shan-Yah. Relation of birth weight to physical development in childhood. Lancet, 1949, 257, 598-602.—Data are presented on the weight and height at half-yearly intervals (up to 13 years of age) of boys and of girls grouped according to birth weight—Group A, 5 lb., 8 oz. or less (207 boys, 310 girls); Group B, 7 lb., 2 oz. to 7 lb., 6 oz. (364 boys, 348 girls); Group C, 8 lb., 8 oz. to 9 lb., 8 oz. (530 and 410); and Group D, 9 lb., 9 oz. or more (163 and 94). The direction of the differences noted at birth tend to be maintained during childhood.—A. C. Hoffman.

3110. Lane, Ronald E., & Logan, Robert F. L. (U. Manchester, Eng.) The adolescent at work. Practitioner, 1949, 162, 287-298.—Attention is called to the abrupt transition of the British adolescent from a care-free school child with a 27-hour week and a 12 weeks' holiday to a number clocking in at the factory gate, working in a gang a 44-hour week with one or two weeks' holiday a year. What has been done in Britain to ease the strain on the adolescent of this transition is discussed from the standpoint of legal safeguards on work of adolescents as to minimal age, hours, health supervision, continuation schools, and recreation.—F. C. Sumner.

3111. McFate, Marguerite Q., & Orr, Frances G. Through adolescence with the Rorschach. Rorschach Res. Exch., 1949, 13, 302-319.—This longitudinal study of a group of children analyzes their Rorschach protocols at 4 different age levels during the adolescent period. This article, first of a series, deals only with the frequency of the occurrence of single scoring variables. Results indicate that the average use of R, K, M, F, P, H, and A increases with age for both sexes. There is a decrease in the use of FM and in cF. The % of adolescents using d and Dd increases through the 4 ages. In the test situation, girls are more responsive than boys, both quantitatively and qualitatively. Girls consistently

use color variables more while a greater number of boys score on the anxiety indicators.—B. J. Flabb.

3112. Moloney, James Clark. Authoritarianism and intolerance. Int. J. Psycho-Anal., 1948, 29, 236-239.—Presence or absence of original parental pressures is said to explain presence or absence of intolerances and race prejudices. Okinawan children "permissively" reared do not show the neurotic reactions of those of other cultures with authoritarian training. World peace can be attained through the development of flexible adults, the products of having been genuinely loved children.—N. H. Pronko.

been genuinely loved children.— N. H. Pronko.

3113. Moodie, William. The adolescent boy.

Practitioner, 1949, 162, 263-268.—The physical changes, the mental development, the transition period, the parental relationship, masturbation, attitude towards authority are aspects of the adolescent boy's development which are briefly discussed here.

— F. C. Sumner.

3114. Murphy, L. B. Art techniques in studying child personality. Rorschach Res. Exch., 1949, 13, 320-324.—The author looks upon the varied approaches of Alschuler & Hattwick, Lowenfeld, Napoli, Naumberg, and Wolff in relation to children's art as "stages in a process of clarification of the meaning of children's art products and related behavior." A brief summary of the viewpoints of each of the above-mentioned authors is presented.—B. J. Flabb.

3115. Ogilvie, Frederick. (Jesus Coll., Oxford U., Eng.) The problem of adolescence. Practitioner, 1949, 162, 261-262.—In prewar Great Britain there was a marked distinction between well-to-do adolescents and the majority who left school at 14 and started to work. With the raising of the school-leaving age this distinction is losing its significance. The author predicts that a continuation of the present change will result in lessening some of the problems of adolescents.—F. C. Sumner.

3116. Richardson, John S. (St. Thomas's Hosp., London, Eng.) The endocrines in adolescence. Practitioner, 1949, 162, 280-286.—This brief survey of endocrine disorders in adolescence touches upon (1) early onset of adolescence with premature puberty; (2) disorders of adolescence associated with onset of puberty; (3) delayed puberty in girls; (4) disorders of the breasts in girls; (5) delayed puberty in boys; (6) breast changes in boys; (7) obesity in the adolescent; (8) the thyroid gland in adolescence.—F. C. Sumner.

3117. Rushforth, Winifred. (The Davidson Clinic, Edinburgh, Scotland.) The adolescent girl. Practitioner, 1949, 162, 269-274.—The following aspects of the adolescent girl's development are discussed: (1) personality changes with its 3 successive phases: isolation; disintegration or conflict; reintegration; (2) the parents in the management of the adolescent daughter; (3) the sex education of adolescent girls; (4) psychogenic disorders of adolescent girls.—F. C. Sumner.

3118. Sposobina, K. H. Fisicheskoe vospitanie v sanitornom dietskom sadu. (Physical training in a

nursery sanatorium.) Doshkol'noe Vospitanie, 1948, 10(Oct.), 35-37.—Designed for underdeveloped or chronically ill children, the nursery sanatorium is usually located in a resort area, near water and woods. The activities are planned jointly by the resident physician and the educational staff with reference to the children's physical conditions and their individual needs. Gymnastics, physical exercises, outdoor games and musical activities predominate. Much emphasis is placed on general morale and happy atmosphere. Entertainment in the form of puppet shows, plays, musical programs is abundant. The meals are carefully planned with a view to their caloric value, variety, and palatability. Vitamins and other body builders supplement the regular diet.—M. G. Nemetz.

3119. Turpin, Raymond. Troubles du développement de l'enfant et problèmes génétiques. (Developmental disorders of the child and genetic problems.) Enfance, 1948, 1, 189-198.—Anomalies in growth of the child may be harmonious or dysharmonious, global or partial. They may stem from qualitative or quantitative variations in the genes and/or may arise from diversely associated hereditary and environmental factors. Biological evidence is adduced in support of these contentions.—F. C. Sumner.

3120. Warters, Jane. (State Teachers Coll., Lock Haven, Pa.) Achieving maturity. New York: McGraw-Hill, 1949. xi, 349 p. \$3.00.—The author's "main purpose is to present in non-technical language certain findings of recent research studies on adolescence and youth and in a way that will help young people to understand themselves and their problems, particularly those problems associated with transition to adulthood." The problems discussed are those of bodily change; relations to family, others and opposite sex; frustrations and feelings of inferiority; adjustive behavior, neurotic personality; schooling and vocation. The author's advice and admonitions are supported by her citations and interpretations of current literature.—L. J. Stone.

3121. Weaver, Herbert B. (U. Cincinnati, O.) A scale for evaluating comic books. Childh. Educ., 1949, 26, 173–175.—Criteria developed within the publishing industry were modified and grouped into 3 areas of evaluation: cultural, moral, and morbid emotionality. In each area, descriptions of comic books are given fitting categories of no objection, some objection, objectionable, and very objectionable. 50 adult raters showed 87% agreement for 619 of the 708 stories in the first series of comic books evaluated.—G. H. Johnson.

(See also abstracts 2911, 2915, 2916, 2926, 3167, 3262, 3286, 3399)

MATURITY & OLD AGE

3122. Albrecht, Ruth. (U. Chicago, Ill.) The social roles of old people in a midwestern community. J. Geront., 1949, 4, 325.—Abstract.

3123. Birren, James E., & Shock, Nathan W. (National Institutes of Health, Baltimore, Md.) Age changes in rate and level of visual dark adaptations. J. Geront., 1949, 4, 330-331.—Abstract.

3124. Burgess, Ernest W. Psychological and sociological characteristics of older people. Publ. Welf. Ind., 1949, 59(11), 3-4.—Abstract.

3125. Burgess, Ernest W. (U. Chicago, Ill.) Social roles of older adults and their personal adjustment. J. Geroni., 1949, 4, 325.—Abstract.

3126. Chandler, Albert R. (Ohio State U., Columbus.) Personal traits of older people as observed by their juniors. J. Geront., 1949, 4, 324.—Abstract.

3127. Clague, Ewan. (U. S. Dept. Labor, Washington, D. C.) Economics of old age. Publ. Welf. Ind., 1949, 59 (11), 8-12.—The problem of the mature workers, age 45 to 64 is not one of retirement, but of retraining for their remaining life work. Such a program points in the direction of significant retraining allowances for a period of one to two years which would be a better social investment than pensioning or public assistance.—V. M. Stark.

pensioning or public assistance.—V. M. Stark.

3128. Clague, Ewan. (U. S. Dept. Labor, Washington, D. C.) The working life span of American workers. J. Geront., 1949, 4, 285-289.—
Two alternative assumptions as to age at retirement from the labor force (1) continuation of the prewar downward trend; and (2) that of 1947 (reflecting full employment) lead to different estimates of work-life expectancy in 1975. "If prewar trends continue, a 20 year old male worker, in 1975, may expect to spend an average of almost 10 years outside of the labor force, as compared to 5.5 in 1940 and less than 3 in 1900." The second alternative suggests that the increase in total life expectancy be added mainly to the period of productive work life. To achieve the latter, and accordingly to reduce old-age dependency and the resulting economic burden, concerted community action in conjunction with employer and labor groups, becomes imperative.—R. W. Beebe.

3129. Furst, Ralph H. Institutional care of the aged. Publ. Welf. Ind., 1949, 59, 8-10.—Group meeting on institutional care for the aged accented the need of aged residents for living in a community which nurtures the spirit and strengthens the morale of the individual by means of an active program.—V. M. Stark.

3130. Havighurst, Robert J. (U. Chicago, Ill.) How the community evaluates the roles of old people. J. Geront., 1949, 4, 325.—Abstract.

3131. Havighurst, Robert J. (U. Chicago, Ill.) Old age—an American problem. J. Geront., 1949. 4, 298-304.—Societies revere, forsake, or in America ignore, the aged. Present economic trends assign productive work to the ages 20-64. Other solutions are suggested to draw old people into the labor force. By 1980, 27% of the voters will be 60 or over. 5 major adjustments of the aging concern: death of spouse, loss of employment and reduced income, affiliation with older group, physical infirmities and

satisfactory living accomodations. People of middleclass status, particularly men, follow the "stay young" theory while lower classes follow the "grow old gracefully" theme. People age at different rates and a widened socially approved range would accommodate more satisfactorily all types of personalities.—R. W. Beebe.

3132. Katzen, Faye. (Jewish Family & Community Service, Chicago, Ill.) Living arrangements for older people. Publ. Welf. Ind., 1949, 59(11), 5-7.—Abstract.

3133. Kuhlen, Raymond G., & Luther, Everett. (Syracuse, U., Syracuse, N. Y.) A study of the cultural definition of prime of life, middle age, and of attitudes toward the old. J. Geront., 1949, 4, 324.—Abstract.

3134. Laverty, Ruth. (Peabody Home, New York.) Basic emotional needs of older people. J. Geront., 1949, 4, 324-325.—Abstract.

3135. Pressey, S. L. (Ohio State U., Columbus.) Employment and service activities of the aged. J. Geront., 1949, 4, 326.—Abstract.

3136. Sands, Sidney L., & Rothschild, David-(Worcester (Mass.) State Hosp.) Sociopsychiatric factors in involutional psychoses, senile psychoses, and normal aging. J. Geront., 1949, 4, 326.— Abstract.

3137. Shanas, Ethel. (U. Chicago, Ill.) The personal adjustment of 388 old age assistance recipients. J. Geront., 1949, 4, 326.—Abstract.

3138. Sheldon, J. H. (The Royal Hospital, Wolverhampton, Eng.) Old age problems in the family. Milbank Mem. Fund Quart., 1949, 27, 119-132.—A random sample was made of 1 in 30 of women over 60 and men over 65 in Wolverhampton. Of the 477 people in the sample, 2% lived in institutions, and 98% at home. Clearly the problems of old age are fundamentally domestic rather than institutional. Factors in the care of the subjects are analysed and discussed from the point of view of the subject and those who care for him.—F. C. Sumner.

3139. Sontag, L. W. (Fels Institute, Yellow Springs, O.) Cultural patterns and their influence on the problems of aging. J. Geront., 1949, 4, 324.—Abstract.

of St. Louis, Mo.) Trends of employment in relation to the problems of the aging. J. Geront., 1949, 4, 290-297.—Mechanization of industry and agriculture has put a premium on ability to adjust to the speed and rhythm of machine operation and has correquently permanently disadvantaged the older worker. The war years and postwar years to date clearly indicate older workers prefer to work largely to maintain their standard of living. The economy cannot maintain large numbers of consumers who are not permitted to produce. A long range program to assist older workers to remain productive and useful members of society should be devised by the concerted efforts of industry, organized labor, private

and public agencies, and of the worker himself.—
R. W. Beebe,

3141. Tangerman, Margaretta S. Supervision of caseloads of the aged. Publ. Welf. Ind., 1949, 59(11), 12-14.—Abstract.

3142. [University of Chicago.] Institute on Problems of Old Age. Reading list. Publ. Welf. Ind., 1949, 59(11), 10-13.—A reading list of 58 items prepared by the U. of Chicago is divided into the following classifications: (1) general suggestions, (2) the role of old people, (3) employment, (4) mental hygiene, (5) physical hygiene and medical care, and (6) social relationships.—V. M. Stark.

3143. Wagner, Margaret. (Benjamin Rose Institute, Cleveland, O.) New frontiers in planning for the older population. Publ. Welf. Ind., 1949, 59(11), 7-8.—Abstract.

3144. Weinburg, Jack. Mental adjustment in old age. Publ. Welf. Ind., 1949, 59(11), 4-5.—Abstract.

(See also abstracts 2912, 3210, 3297, 3347)

SOCIAL PSYCHOLOGY

3145. Allee, W. C. Extrapolation in comparative sociology. Scientia, 1949, 84(447-448), 135-142.— Comparative sociology may be helpfully approached by using the evolutionary interpretation that the animal kingdom has two main phylogenetic divisions culminating respectively in the more highly evolved vertebrates and insects. The comparisons are valid only when made between two sets of animals having relative equal degrees of divergent structural and physiological specialization and each near the peak of its own line of evolution. What is learned from the study of one can be used to predict what may happen in the other, if both show like responses to the same conditions.—N. De Palma.

3146. Boalt, Gunnar. Socialpsykologi. (Social psychology.) In Sjöstedt, C. E., Problem i den moderna psykologien. (See 24: 2903), 87-104.— Considered briefly and in an introductory fashion are: (1) Le Bon's crowd psychology, (2) McDougall's instinct psychology, (3) general attitudes and intelligence tests as these differentiate groups, and (4) genetic social psychology or the factors involved in the social development of the individual. In conclusion, the author contends that whereas it is easy to draw sharp boundaries between psychology, social psychology, and sociology in theory—it is impossible to do so in practice.—A. Teiler.

impossible to do so in practice.—A. Tejler.

3147. Farnham, Marynia F. (New York Psychiatric Institute.) Battles won and lost. Ann. Amer. Acad. polit. Soc. Sci., 1947, 251(May), 113–119.—The tragedy of women drawn into outside employment through the demands of the industrial revolution is the central theme. The author reexamines the gains women claim to have made and finds only a Pyrrhic victory. Evidence on the red side of the ledger is found in: (1) increase in the divorce rate, (2) growth in the delinquency rate, (3) large number of breakdowns in the armed forces

attributable to home deficiencies, (4) hostility between the sexes displayed in literature, drama, and daily social contacts, and (5) constant emphasis on women's problems in current advertisements. The author sees women's mistake in attempting to be like men, whereas she believes that personality differences arising from biological factors have survived too long to be ignored.—L. A. Noble.

3148. Pleure, H. J. Some biological considerations in social evolution. Eugen. Rev., 1949, 41, 134-140.—Probable factors in the evolution of Homo sapiens in temperate climates, including physical condition and environmental circumstances are discussed. Tremendous technical experiments and flights of thought, crowded into a mere 4,000 years, have recently become intensified with power machinery and urban industrialization. Many old ideas still in current use are now out of perspective, including the notion that man can quickly be remolded by changing his environment. The encouragement of individual initiative and the need to cultivate a common group heritage are both important.—G. C. Schwesinger.

3149. Goss, Hilton P. Civilian morale under aerial bombardment, 1914–1939. Pts. I & II. Maxwell Air Force Base, Ala.: Air University Libraries, Air University, 1948. (Documentary Res. Div.) v, 296 p.—The detailed, documented account reviews aerial warfare from the Italo-Turkish conflict through the Spanish Civil War to "explain the circumstances under which such raids occurred" and to assess "reactions of civilian populations." Efforts to limit or regulate aerial warfare are described. On the basis of preludes to World War II the writer believes an estimate of "potentialities for physical damage was possible . . . although . . . by no means conclusive," but that no one "could safely

say that mass bombardment of civilians would either stiffen or break the will to resist.—R. Tyson.

3150. Kluckhohn, Clyde. (Harvard U., Cambridge, Mass.) The limitations of adaptation and adjustment as concepts for understanding cultural behavior. In Romano, J., Adaptation, (see 24: 2890), 96-113.—Functionalism as a theory in cultural anthropology has since 1920 established itself, and the differences with historicalism have been reconciled. However, pure functionalism does not appear to be a sufficient theory. "We must take account of the possibility that some functional necessities of societies are referable primarily to the collectivity rather than to the biologically derived needs of the component individuals. We require a way of thinking which takes account of the pull of expectancies as well as the push of tensions, which recognizes that growth and creativity come as much or more from instability as from stability, which emphasizes culturally created values as well as the immediately observable external environment."-C. M. Louttit.

3151. Pribram, Karl. Conflicting patterns of thought. Washington, D. C.: Public Affairs Press, 1949. viii, 176 p. \$3.25.—This treatise seeks "to

provide an analytical outline of the logical background of the four leading social philosophies—the scholastic, the individualistic, the nationalistic, and the Bolshevistic—and to indicate the influence of their methods of reasoning upon the development of specific social, political and economic institutions." In dealing with this basic purpose, the author has avoided the "political" point of view for the psychosocially oriented analysis of "modern conflicting patterns of thought." The orientation of these several viewpoints toward many of the principal "international problems now facing the Western democracies" are discussed.—M. A. Seidenfeld.

Kultúra a Mravnost. 3152. Sirácky, Andrej. Bratislava: Slovenská (Culture and morality.) Akadémia Vied a Umení, 1949. 182 p.-Ethical values and the differentiation between good and evil are a question of social psychology rather than of individual thinking. As the nature of society changes, its morality undergoes a corresponding modification; far from being absolute, it is relative to conditions of existence, and the social conscience of a particular period of history necessarily reflects human wants, activities, aspirations as well as However, a morality that expresses illusions. primarily the psychology of one class is bound to be one-sided, faulty, even hypocritical. Only when antagonistic relations of various groups are overcome can humanistic ideals and norms become the true and sincere expression of an entire people, the credo of their very life.-R. B. Winn.

3153. Spiel, Oskar. Gemeinschaft als Idee und Realität. (Society as idea and reality.) Int. Z. Indiv.-Psychol., 1948, 17, 145-156.—Aristotle's assumption of a "social drive" is found an inadequate and misleading explanation of social cohesiveness. The "epistomological problem of how society and communal living is possible" is examined with extensive reference to Raetset der Gesellschaft by Max Adler. Society is based on the "mental socialization of the individual consciousness." In reality the community depends on men "who are conscious of their harmony and whose conscious aim is the realization of values."—C. T. Bever.

3154. Tavares Bastos, Aureliano. Os automatismos sao nocivos, ou uteis? (Are automatisms harmful or useful?) Rev. Centro psiquiát. nac., Rio de J., 1946, 1, 25-26.—Human activity in modern society requires continuous repetition of similar acts. The result is a stereotyped activity with very little use of intelligence or originality. A lesser dominance of routine activities would be more reasonable.—A. Manoil.

3155. Watson, Goodwin. (Columbia U., New York.) Dewey as a pioneer in social psychology. Teach. Coll. Rec., 1949, 51, 139-143.—According to Dewey, educational science is first of all a social science, which is the only hope for intelligent attack on major world problems. The most important trends in social psychology were forecast in Dewey's conceptions, a generation ago. These include the formation of social norms, the strength of group feel-

ing in industrial productivity, class stratification in American society, the value of participation and ego involvement, group dynamics, action-research, the function of play and art as a foundation for a modern psychotherapy, and the psychology of social change. G. E. Bird

3156. Wright, H. W. The social, as distinguished from the behavioural, field. Canad. J. Psychol., 1949, 3, 213-217.—The social field is viewed as the necessary correlate of inter-personal communication. Persons reared in the same culture and speaking the same language act in the same social field regardless of individual differences in attitudes, tastes, etc. The social field makes it possible for the individual to understand others with different tastes, wishes, etc.-J. W. Bowles, Jr.

(See also abstracts 2897, 2956, 3100)

METHODS & MEASUREMENTS

3157. Gallup, George. On the regulation of polling. Publ. Opin. Quart., 1948-49, 12, 733-735.—The question of government regulation of polls has come up in Congress several times and will undoubtedly come up again. Because of the difficulties involved, and described briefly here, stringent self-regulation is more desirable, and is in the development stage now. Until a strict code of ethics and practises can be adopted, the best policy is the "open door" policy. The AIPO has maintained this policy through extensive publications and by granting access to its data to qualified students. It would be desirable for critics of polls to adopt some standard of truth and accuracy so that their criticisms would be as objective and factual as are the polls.-H. F. Rothe.

3158. Hofstätter, Peter R. (U. Graz, Austria.) Die Psychologie der öffentlichen Meinung. chology of public opinion.) Vienna: Wilhelm Braumüller, 1949. xi, 184 p. \$2.40.—In nine chapters manifold ignorance, adaptation, conviction and its transformation, frequency of individual attitudes, stereotypes, public expression of public opinion, prestige, propaganda, public life—the author defines two objectives: To present a survey of research in public opinion to date for German speaking readers, and to construct a psychological theory of public opinion. Most of the research presented has been published in American journals. The bibliography appears as footnotes.—G. Rubin-Rabson.

3159. Seeley, John R. (U. Toronto, Can.) The net of reciprocal influence; a problem in treating sociometric data. Canad. J. Psychol., 1949, 3, 234-240.—This is a technical note on the processing of sociometric data.- J. W. Bowles, Jr.

3160. Strunk, Mildred [Ed.] Quarter's Polls. Publ. Opin. Quart., 1948-49, 12, 754-783.

3161. Wallace, D.; Woodward, Julian L., Stern, Eric; Barionz, Max, & Ylvisaker, Hedvig. Experience in the Time International Survey: a symposium. Publ. Opin. Quart., 1948-49, 12, 709-721.—In connection with a proposed International Forum in April, 1948, Elmo Roper and Time magazine

attempted to obtain comparable data simultaneously in ten countries. The Forum was cancelled, but the 5 papers presented in this symposium discuss some of the methodological problems encountered. Wallace and Woodward describe the mechanics of the survey briefly and also summarize the experiences. Stern describes the problems of sampling, translating, and timing an international survey. describes some of the special problems in France, and Ylvisaker describes some of the problems in Germany .- H. F. Rothe.

3162. Wilson, Elmo C. (Columbia Broadcasting System, Inc., New York.) The measurement of public opinion. Ann. Amer. Acad. polit. Soc. Sci., 1947, 250(Mar.), 121-129.—Techniques of opinion research, the variety of problems subject to attack, and the multitude of current polling agencies are reviewed, with practical stress on the need to consider expense, speed, and degree of precision required. Appraisals by industrialists and politicians are evaluated, with most of their criticisms tending toward the favorable. Unique political uses of the polling technique, such as checking the accuracy with which an elected representative mirrors his constituents' opinions, are discussed. Suggested changes are: (1) use of the "area" rather than the "quota" method of sampling, (2) measuring less conscious attitudes by projective techniques rather than by interview, (3) more stress on measurement of intensity of attitudes, and (4) more attention to the views of "opinion leaders."—L. A. Noble.

CULTURES & CULTURAL RELATIONS

3163. Abel, Theodora M., & Hsu, Francis L. K. Chinese personality revealed by the Rorschach. Rorschach Research Exch., 1949, 13, 285-301.— China-born groups of subjects, both male and female, fit the Chinese cultural role of control and reserve, as indicated by their Rorschach protocols. Chineseborn girls show greater flexibility than Chinese-born men and seem to have reached a satisfactory balance between themselves and the world. American-born Chinese males show much emotional disturbance which is apparently related to the lack of a clear definition of their role in society. Repressed rebellious feelings are present and there is evidence of difficulty in the sexual area. American-born Chinese girls show frequent overt signs of maladjustment. However, they show better ability to adjust than do the American-born males. They face conflicts more squarely and seem to have obtained an equilibrium similar to that of the China-born girl.—B. J. Flabb.

3164. Dube, S. C. Myths, religion and ritual of the Kamars. Eastern Anthrop., 1947, 1(1), 27-42. The Kamars are a small aboriginal tribe who inhabit a small area in central India. Examples are presented of Kamar myths about the origin of the world and the creation of man and animals. The religion is pantheistic and various gods are described. The chief religious ceremonies and festivities are briefly described, including various magic rites.-E. A.

Rubinstein.

3165. Knox, John Ballenger. (U. Tennessee, Knoxville.) The people of Tennessee; a study of population trends. Knoxville: U. of Tennessee Press, 1949. xvi, 191 p. \$3.00.—The distribution of the 3 million people of Tennessee according to ancestry, color, age, sex, and place of living in the state is described. Marriage, birth, and health rates are compared with national rates. In the last section, the employment pattern for the state is presented. 132 item bibliography.—G. K. Morlan.

3166. Mathieu-Fortin, Claire. L'usage du test Rorschach dans l'étude anthropologique d'une société paysanne. (Use of the Rorschach test in the anthropological study of a peasant society.) Canad. J. Psychol., 1949, 3, 226-230.—The study is a part of an anthropological investigation of the peasant society of the people of l'Isle-Verte. The Rorschach was administered to a sample of 50 males and females ranging in age from 8 to 79 years. The paper describes the chief character traits common to the group. English summary.—J. W. Bowles, Jr.

3167. Radke, Marian (Massachusetts Institute of Technology, Cambridge), & Sutherland, Jean. Children's concepts and attitudes about minority and majority American groups. J. educ. Psychol., 1949, 40, 449-468.—All children in grades V through XII in a small mid-west town, 275 in all, answered the questions "what is an American like" and "why do you think so?" Replies were similarly obtained regarding "a Jew" and "a negro." These children, who had little or no contact with either minority group, showed strongly developed stereotypes. With age, the descriptions of Jews and negros become more derogatory and the attitudes more hostile. Constructive teaching of democratic ideas and attitudes is needed in relatively homogeneous "American" localities as well as where minority members are present.—E. P. Mallory.

3168. Sanwal, B. D. The people of Nepal. Eastern Anthrop., 1947, 1(1), 1-7.—Only two serious students of ethnology have attempted to classify the races and evaluate the cultures of Nepal. Much the same historical processes which have changed the racial characteristics of the whole of India have influenced the ethnology of Nepal. "Tibetan blood is predominant in the North and East of Nepal and the Indo-Aryan blood as distinct from earlier Nepal blood in the valleys of Karnauli and Rapti, while some other parts of Nepal preserve to a certain extent the same racial complexion that they did have about 1,000 B.C."—E. A. Rubinstein.

(See also abstracts 2927, 3112, 3373)

SOCIAL INSTITUTIONS

3169. Belden, Joe. The Texas Poll and the general election of 1948. Publ. Opin. Quart., 1948-49, 12, 726-728.—The Texas Poll, which missed Truman's vote by 4% in 1948, is described as to sample and some practises.—H. F. Rothe.

3170. Bower, Robert. (Columbia U., New York.)
Public opinion polls and the politician. Ann. Amer.

Acad. polit. soc. Sci., 1948, 259(Sept.), 104-112.— The author feels that the solution of the problem of more accurate prediction in opinion polling lies in a more careful study of the characteristics of the 13% of voters whose opinions or non-opinions shift on election eve. The politician also stands to gain from knowing the characteristics of this group so that he can more effectively reach them. Beyond the practical aspects of prediction, further analysis of the motives behind political attitudes should be a prime concern of the social scientist. One of the most important questions is whether the voter is finally swayed by long-term habitual party association or by the immediate issues presented.—L. A. Noble.

3171. Fink, Kenneth, & Lutz, Robert G. (Princeton (N. J.) Res. Serv.) Fieldwork in the New Jersey election prediction. Publ. Opin. Quart., 1948-49, 12, 724-726.—Accurate polling depends upon preparation of a valid sample, the best possible field work to insure that the cross-section is actually obtained, and correct timing. Of these 3 factors, careful field work is the most difficult to secure and too often has received the least attention. The New Jersey Poll, 1948, which predicted 6 candidates accurately and with an overall error of 2.7%, utilized six basic field techniques which are described.—H. F. Rothe.

3172. Goldish, Sidney. The Minnesota Poll and the election. Publ. Opin. Quart., 1948-49, 12, 722-724.—An analysis of the underestimation of the Democratic vote in Minnesota in 1948 reveals several possible factors. The main difficulty was the disposition of the "undecided" and "won't say" respondents. The split ballot method was used throughout the campaign, with alternate respondents replying by secret ballots. The secret ballots gave a slightly more accurate measure of election results than did the ballots on which respondents were asked to state their preferences openly.—H. F. Rothe.

3173. Houser, Frank E. (Wheaton Coll., Wheaton, Ill.) The structure and institutionalization of a protest group. Trans. Ill. Acad. Sci., 1949, 42, 130–139.—The organization and history of the Orthodox Presbyterian Church are analyzed from the point of view of social integration. It is concluded that "the phenomenon of institutionalization is in large part the result of decision situations in the sect-church dilemma which in turn have the unpurposed concomitants of structural complexity, accommodation to out-groups, and routinization of charisma."—C. M. Louttit.

3174. Inkeles, Alex. (Harvard U., Cambridge, Mass.) Family and church in the postwar U.S.S.R. Ann. Amer. Acad. polit. Soc. Sci., 1949, (May), 33-44.—The author describes some major post-war readjustments in the legal attitude toward the family and church in the Soviet Union. The greater cost of divorce, penalization of the illegitimate child, restrictions on abortion, and rewards for large families show the much lessened opportunity for free choice and the heavier intervention of the state in marriage matters which resulted from the discovery that the family was the most economical and effective unit

for child care. The post-war right-about-face toward the church was much more sudden and unexpected, resulting from the help given by this institution toward the winning of the war. All of this is seen as a long range stabilization process following an earlier

experimental phase.- L. A. Noble.

3175. Marcus, Joachim. Structures familiales et comportements politiques. (Family structure and political behavior.) Rev. franq. Psychoanal., 1949, 13, 277-313.—For the individual, the authority of the state is a reproduction of the family authority pattern by which he was moulded in childhood. The family attitude toward children and the political characteristics of Nazism, America, China and others are discussed.—G. Rubin-Rabson.

3176. Myers, Robert J. (Social Security Administration, Washington, D. C.) Same-sex families. J. Hered., 1949, 40, 268-270.—A statistical study of 999 families, secured from Vol. 20 of Who's Who in America, indicated no evident tendency for all the children within any particular sibship to be of the same sex, as is sometimes believed. This conclusion, drawn for the aggregate, still allows for the possibility of a small proportion of families possessing the "same-sex characteristic," a fact which could be obscured when all families are considered in toto. Further study, with more refined techniques, is suggested.—G. C. Schwesinger.

3177. Parker, Charles E. Polling problems in state primary elections. Publ. Opin. Quart., 1948-49, 12, 728-731.—3 major local polls predicted the outcome of the Republican primary election, for governor, in June 1948, incorrectly by about 20%. The present paper analyzes the possible sources of this error. The panel was re-interviewed immediately after the election. The chief factor was apparently a great last-minute change brought about by very extensive personal worker influences.—

H. F. Rothe.

3178. Pope, Liston. (Yale U., New Haven, Conn.) Religion and the class structure. Ann. Amer. Acad. polit. Soc. Sci., 1948, 256(Mar.), 84-91.—This 1946-47 study, sponsored by the Federal Council of Churches, shows much less similarity between the class alignments of Protestants and Catholics than did Cantril's prewar study. Protestants are generally representative of higher social classes. It must be remembered, however, that within the Protestant faith certain denominations deviate from the general class norm. The study confirms the higher educational level of members of the Protestant and Jewish faiths. It emphasizes the large number of union members in all religious groups, especially Catholic and Jewish, and discusses differences in voting preferences. The church is seen as primarily an institution of the middle class, and the prediction is made that it will continue to support rather than break down class differences .- L. A. Noble.

3179. Smith, George Horsley, & Dobin, Joel. Information and politico-economic opinions. Publ. Opin. Quart., 1948-49, 12, 731-733.—In 1947 a sample of 911 high school seniors was polled regard-

ing civil rights and Russia, and was tested on a vocabulary test and information test about Russia. The high vocabulary-information group was more liberal than the low group (favoring civil rights), and the high group tended to be more favorable to Russia. There were no differences regarding unions, and the low verbal group was more "radical" (favoring government guarantees of jobs and living standards) than the high group. These trends are regardless of occupational level of parents although the differences are not all statistically reliable.—

H. F. Rothe.

3180. Williamson, René de Visme. (U. Tennessee, Knoxville.) Culture and policy; the United States and the Hispanic world. Knoxville, Tenn.: University of Tennessee Press, 1949. x, 66 p. \$2.00.—Our foreign policy in Spanish America is failing because we neglect culture and ideals while over-emphasizing economics and military security. Our dollar diplomacy and recognition politics can win support of the rulers of peoples but not of the peoples themselves. Especially offensive is our support of Fascist Franco in Spain, because in this we fail to consider the characteristics of the Spanish-speaking populace whose moral and sentimental considerations of culture and ideals carry more weight than economic or military influences.—G. Elias.

(See also abstract 2919)

LANGUAGE & COMMUNICATION

3181. Black, John W. (Kenyon Coll., Gambier, O.) Intelligibility in voice communication. Port Washington, N. Y.: Special Devices Center, 1949. (Final Tech. Rep. SDC 411-1-17.) 36 p.—A synthesis of 15 research studies in improvement of voice communication are presented. Experimental procedures are omitted and conclusions summarized briefly. The major emphasis of the work is that of describing speaking in a variety of circumstances, particularly in different acoustic environments. Variation in normal speech is found to accompany different types of messages, different sounds and different stimulus voices.—L. B. Seronsy.

3182. Black, John W. (Kenyon Coll., Gambier, O.) Timed phrases. Port Washington, N. Y.: Special Devices Center, 1949. (Tech. Rep. SDC 411-1-5.) 9 p.—"Phrases that are alike in numbers of syllables may not consume an equal length of time as spoken. Approximately 500 five-syllable phrases were read by 18 speakers. Mean duration/phrase was determined. This paper classifies the phrases according to these values. Experimenters may select equivalent phrases for use in tests that are concerned with vocal duration."—L. B. Seronsy.

3183. [Hanley, T. D., & Draegert, G. L.] Effect of level of distracting noise upon speaking rate, duration, and intensity. Port Washington, N. Y.: U. S. Navy, Special Devices Center, 1949. (Tech. Rep. SDC 104-2-14.) iii, 16 p.—With no training in voice communication techniques, 48 S's read a

standard passage into a circuit containing devices for measuring and recording the voice. Four different noise conditions were used. Results indicate that such untrained S's tend to recognize and identify correctly increasing amounts of distracting noise and to react in what has been assumed to be a desirable manner, i.e., they reduce the rate of speaking, prolong syllables, reduce pause-time and speak with greater intensity as noise increases. Logarithmic curves of type $y = a \log x + b$ fit all functions adequately within the range of observations of this experiment.—L. B. Seronsy.

3184. Hayakawa, S. I. Two views on listening: II. The task of the listener. Etc. Rev. gen. Semant., 1949, 7, 9-17.—As society has become more interdependent the more it has become necessary to coordinate human effort. This coordination is achieved by language. Individuals are now required to interpret more words per day than at any time in history. The demand to evaluate what we hear is so great that much scepticism is prevalent. In this connection the science of semantics has arisen. This science "is the study of the relationships between symbol and reality, between language and behavior, between words and their consequences." Language functions can be classified as the informative function, the systematic use (in which language is used to give information about our linguistic systems), the directive function (in which language is used to control future behavior), and the expressive or valuative function (in which language is used to express preferential feelings).—H. R. Myklebust.

3185. Hofstätter, Peter R. (U. Gras, Austria.) Vom Leben des Wortes. (The world of words.) Vienna: Wilhelm Braumüller, 1949. viii, 59 p. \$1.20.—The author's purpose is to discover the rôle of words and speech in mental life by reference to Plato's Cratylys. Five chapters trace the rôle of etymology in the world of language, the meaning of words for human monologue, the vocabulary of psychology, the pantomime of sound and the construction of language. The sixth summarizes his conclusions.—G. Rubin-Rabson.

3186. Johnson, Wendell. (U. Iowa, Iowa City.) Two views on listening: I. Do you know how to listen? Etc. Rev. gen. Semant., 1949, 7, 3-9.—War research revealed 4 factors essential for effective listening. These were the speaker, the listener, the message and, under certain conditions, the mechanical means of communication. Best results were achieved when the speaker spoke in a high pitch, monotonously, and more slowly than usual. Standardized messages with optimum length of 3 to 6 words were most successfully heard. Inefficient listening was related to tension and intently trying to hear. For clinical purposes, this indicates that psychotherapists should remain relaxed and "hear the patient out." The general semanticist has made a contribution to the art of listening by urging and developing an attitude which asks from the speaker, "What does he mean," "How does he know?" and "What is he leaving out?"—H. R. Myklebust.

3187. Kelly, J. C. (Purdue U., Lafayette, Ind.) Syllable duration and intensity related to intelligibility. Port Washington, N. Y.: Special Devices Center, 1949. (Tech. Rep.-SDC 104-2-15.) 18 p.—40 S's talked over radio-telephone circuits under 3 conditions: (1) in quiet prior to voice communication instruction, (2) with aircraft noise (103 db re.0002 dynes/cm³) prior to voice communication instruction, and (3) with same noise after 2 hours of voice communication instruction. Both intensity and syllable duration increased significantly when exposed to noise even before any instruction; after instruction, specially designed to increase both factors, a further increase occurred by a significant amount. Intensity and syllable duration were positively correlated at all levels of testing although the correlations were not high; both factors were also related to speech intelligibility and this relation increased with training.—L. B. Seronsy.

3188. Lightfoot, Charles. (Kenyon Coll., Gambier, O.) Some effects of the common cold upon speech. Port Washington, N. Y.: U. S. Navy, Special Devices Center, 1949. (Tech. Rep.-SDC 411-1-8.) 27 p.—In an effort to quantify the effects of a cold upon speech, 24 S's read intelligibility tests "with a cold," "with a treated cold" and "after recovery." Recordings were played back to a panel of listeners under various conditions. Analysis of the results shows that (1) intelligibility was not systematically changed as a result of a cold, (2) untrained audiences were able to identify voices with a cold, (3) no single group of speech sounds was found to distinguish a voice with a cold.—L. B. Seronsy.

3189. Sussman, Leila A. (Columbia U., New York.) The personnel and ideology of public relations. Publ. Opin. Quart., 1948-49, 12, 697-708.—
Analysis of the personal histories of 132 public relations men, and content analyses of 12 leading public relations publications reveals: the men are specialists in verbal symbols; they are prosperous, and politically and economically somewhat non-conformists; they are economically, geographically and socially mobile; their job is visualized as keeping open a two-way communication between the various publics and business management; conflicts can be solved within the free enterprise system by better communication.—H. F. Rothe.

(See also abstracts 2897, 3081, 3082, 3381)

CLINICAL PSYCHOLOGY, GUIDANCE, COUNSELING

3190. Brooke, Esther Eberstadt. You and your personality. New York: Harper, 1949. ix, 176 p. \$3.00.—Concepts, points of view and working principles have developed from experience in the author's counseling agency in New York City. In the introduction personality is defined. The remainder of the book is divided into 5 sections entitled: the you you want to be, the you you can be, the you you know yourself, the you people think you are, and the you people see.—M. O. Wilson.

3191. Ebaugh, F. G., & Hirschberg, C. Mental hygiene. In Spiegel, E. A., Progress in neurology and psychiatry, 1947, (see 24: 3261), 370-376.—This is an evaluation of the current (1946) role of psychiatry in medicine, industry, civilian life, sociology and anthropology, vocational rehabilitation and child guidance.—C. E. Henry.

3192. Field, Minna. (Montefiore Hosp., New York.) Family sessions: a new co-operative step in a medical setting. J. soc. Casewk, 1949, 30, 417-421. —There has been a growing effort to integrate the medical and social aspects of the patients' treatment. As a result, family members have been included in direct participation in the doctor-social worker-patient relationship.—V. M. Stark.

3193. Geisel, Winifred M. (Grand Valley Children's Center, Grand Rapids, Mich.) The psychiatric nurse in the community. Amer. J. Nurs., 1949, 49, 23-24.—The program of training for student nurses at various hospitals with a view to later psychiatric affiliation with child guidance clinics as psychiatric nurses (mental health nurses) is described as it operates in Michigan. With her medical background and experience, the psychiatric nurse has a definite place not only at the bedside or in the hospital, but in the broader field of community service.—F. C. Sumner.

3194. Pratt, Dallas, & Neher, Jack. Mental health is a family affair. Publ. Affairs Pamphl., 1949, No. 155. 31 p.—Dealing as it does primarily with the preventive elements of mental hygiene within the family structure, this pamphlet attempts to discuss in its compact confines problems of adolescent love, marriage training, preparental training, childbirth, breast feeding and feeding problems of the infant as well as the mental hygiene of the maturation process from birth to adult life. A reading list suitable for lay readers is included.— M. A. Seidenfeld.

3195. Santos, Elvin H., & Stainbrook, Edward. Nursing and modern psychiatry. Amer. J. Nurs., 1949, 49, 107-109.—The traditional, rigid, authoritarian attitudes of both doctors and nurses toward nursing education constitute one of the obstacles in the way of general acceptance of the new psychiatric nursing functions stemming from psychodynamic psychology. Three urgent tasks of modern nursing education of psychiatric significance are discussed.-F. C. Sumner.

(See also abstracts 2958, 2964)

METHODOLOGY, TECHNIQUES

3196. Adler, Morris H. (Vets. Adm., Boston Reg. Off., Boston, Mass.), Balenstein, Arthur F., & Michaels, Joseph J. A mental hygiene clinic; its organization and operation. J. nerv. ment. Dis., 1949, 110, 518-533.—As an aid to the planning of other mental hygiene clinics, a description is given of the organization and operation of the Veterans Administration's Mental Hygiene unit of the Boston Regional office. "The development of the clinic, the integration of the professional disciplines, and the manner in which therapy is provided has been delineated in detail under the following headings: Function, Framework of Reference, Structure, Operation, Training and Research."—N. H. Pronko.

3197. Alexander, F., & Piers, G. J. (U. Illinois, Chicago.) Psychoanalysis. In Spiegel, E. A., Progress in neurology and psychiatry, 1947, (see 24: 3261), 500-517.—The 67 papers cited for this review deal with clinical application, therapy, child analysis and cultural applications .- C. E. Henry.

3198. Altus, William D. (Santa Barbara Coll., alif.) Adjustment and food aversions among Army illiterates. J. consult. Psychol., 1949, 13, 429-432.—The author, after making an item analysis of Wallen's food check list, devised another food check list which included 8 of Wallen's list. The list was administered to 100 illiterate Army soldiers. It is concluded that the number of one's food aversions is a partial index of his adjustment.—S. G. Dulsky.

3199. Bowers, Swithun. (St. Patrick's Coll., Ottawa, Can.) The nature and definition of social casework: Part III. J. soc. Casewk, 1949, 30, 412-417.—The fact is established that the special skill of caseworkers is skill in relationship and their special knowledge is that of human relations. (See 24: 2575).—V. M. Stark.

3200. Ives, Olive Lord. A critique of teachers' ratings of high school boys as an indication of later neuropsychiatric rejection for the armed services. Teach. Coll. Contr. Educ., 1949, No. 950, vii, 67 p.-The Teacher Appraisal Blank developed by Selective Service during World War II as an aid to psychiatric screening of inductees was studied to determine whether teacher-ratings of boys were related to later acceptance or rejection of selectees. Comparison was made of the blanks of 284 men who were rejected with the blanks of a control group of 284 men who were accepted. Rejection for neuropsychiatric reasons alone was employed as the major criterion. All the men were registered in the New York City area. "On the basis of the item-by-item analysis of the reliability and validity of the Teacher Appraisal Blank it appears that this questionnaire is of negligible value as an aid to neuropsychiatric diagnosis." Data on the cost to the Army of neuropsychiatric cases are summarized, and a critique of rating scales is included. 51-item bibliography.-J. E. Horrocks.

3201. Kafka, John S., & Bolgar, Hedda. (V.A., Chicago, Ill.) Notes on the clinical use of future autobiographies. Rorschach Res. Exch., 1949, 13, 341-346.-Projection into the future seems to be the most obvious and natural projective technique. Future autobiographies are utilized as a means of securing this material. These productions are examined as to: (1) the structurization of the future, (2) the extent to which reality factors are taken into consideration, and (3) the specific content. Observations lead to the hypothesis that the early reaction to the request to formulate a future autobiography is a strongly affective one. A further hypothesis is

that the speed with which a shift to a reasonably realistic description of the future can be accomplished is a function of the relative lack of important unresolved conflicts, the effective functioning level of immediate defenses, and the subject's intelligence.—
B. J. Flabb.

3202. Meyer, Mortimer H. (V.A., Los Angeles, Calif.) Integration of test results with clinical observations; a diagnostic case study. Rorschach Res. Exch., 1949, 13, 325-340.—This case study is presented in an effort to illustrate the problem encountered by the clinical psychologist when test findings seem to differ from clinical observations. Complete test results and interpretation are given of the Rorschach, TAT, Draw a Person, Wechsler-Bellevue, and Sentence Completion Tests for a 26-year-old white male, believed to be suffering a war neurosis.—B. J. Flabb.

3203. Plottke, Paul. Epistolary guidance: an Adlerian contribution. Indiv. Psychol. Bull., 1949, 7, 171–185.—The case study of a 25-year-old British soldier is presented to illustrate the value of epistolary guidance. The author feels that the latter may be an efficient means for aiding an individual to transform a "primitive life-style." However, a psychological correspondence on the level of intellectual teaching without touching the individual as a whole and his attitudes toward others is inadequate. This form of guidance is applicable to persons of any degree of education, provided that they desire it and can express themselves easily in writing and read replies with understanding. When followed or preceded by at least one or two personal interviews, this method is especially efficient.—A. R. Howard.

3204. Redwin, Eleanore. Re-education through counseling. Indiv. Psychol. Bull., 1949, 7, 162-170.

The cases of three women under 25 years of age are presented. The similarity of their behavior and that of "difficult children" is emphasized. However, the behavior is not as direct and overt as in the earlier formative period. It is also pointed out that in counseling young adults, the active cooperation of the families is often lacking. In addition, the pattern of life in the young child is not so firmly established nor concealed to so great an extent.—A. R. Howard.

3205. Sytz, Florence. (Tulane U., New Orleans, La.) Teaching recording. J. soc. Casewk, 1949, 30, 399-405.—The problem in casework and group work recording is of reuniting recording and practice, of making records more usable, and of experimenting with ways of doing this. Several assumptions and steps in thinking are listed in which recording is made an integral part of the casework process.—V. M. Stark.

(See also abstracts 2919, 3266, 3407)

DIAGNOSIS & EVALUATION

3206. Altus, William D. (Santa Barbara Coll., U. California.) Adjustment and subtest variation on the Army Wechsler for the mentally limited. J. gen.

Psychol., 1949, 40, 167-176.—Verbal subtests from the Army Wechsler were taken by groups of illiterates whose adjustment was determined by use of a 36-point screening test. Higher levels of adjustment accompanied higher test scores. Test scores of less-adjusted trainees were more closely related than those of the better adjusted.—B. R. Bugelski.

3207. Balint, Michael. On Szondi's 'Schicksalsanalyse' and 'Triebdiagnostik.' Int. J. Psycho-Anal., 1948, 29, 240-249.—Whatever the fate of Szondi's theories, he, nevertheless, contributed a valuable diagnostic and research instrument to psychology and psychiatry. His use of pictures of people rather than inkblots showed that our reactions to such pictures follow definite laws that permit inferences about the structure of the mind and the forces and tensions operating in it.—N. H. Pronko.

3208. Elizur, Abraham. Content analysis of the Rorschach with regard to anxiety and hostility. Rorschach Res. Exch., 1949, 13, 247-284.—The Rorschach Content Test (RCT) is presented as a technique to measure anxiety and hostility tensions by a content analysis of Rorschach data. Use of this method yields both quantitative and qualitative measures of these tension systems. Responses which show anxiety are designated as "A" responses, those indicating hostility, as "H" responses. Results suggest that the individual receiving a large number of "A" is a person tending to suffer from fears and phobias, and who lacks confidence. The person with a large "H" score is an individual with much resentment against others. The RCT may be used as an independent technique or in conjunction with the Rorschach; it is quickly and easily scored.—B. J. Flabb.

3209. Halpern, Florence. (Bellevue Hosp., New York.) The Rorschach test and other projective technics. In Spiegel, E. A., Progress in neurology and psychiatry, 1947, (see 24: 3261), 425-434.—The year 1946 was a plateau year for these techniques with no startling innovations. The 18 cited papers reflect less interest in diagnosis and more interest in drives and motives. Studies deal with Rorschach, SIC, Picture Frustration and projective attitude tests and a new inkblot series.—C. E. Henry.

3210. Hunt, Wilson L. (Boston (Mass.) State Hosp.) The relative rates of decline of Wechsler-Bellevue "Hold" and "Don't-Hold" tests. J. consult. Psychol., 1949, 13, 440-443.—An analysis is made of the mean and standard deviation of subtest scores for different age groups from Wechsler's data. It is concluded that only two of the "Hold" tests, Information and Comprehension, hold up well with increasing age. Block Design and Digit Symbol are the only two "Don't-Hold" tests that show gradual and consistent age decline with respect to Information and Comprehension. Using only these four test results will give a better measure of normal deterioration.—S. G. Dulsky.

3211. International Psychological Service Center. Medicopsychological Research Staff. A standard method for recording Rorschach test administration

and computation procedures. Psychol. Serv. Center J., 1949, I, 21-28.—A Standard Rorschach Psycho-diagnostic Record Booklet which has been used experimentally for several years in hospitals and clinics is described. Facsimiles of the pages of the Record Booklet are reproduced.—H. Feifel.

3212. Jones, Lyle V. (Stanford U., Calif.) A factor analysis of the Standard-Binet at four age levels. Psychometrika, 1949, 14, 299-331.—Scores on the 1937 Binet were analyzed by Thurstone's centroid method. Matrices of data at ages 7, 9, 11, 13 (n; 200 each) were analyzed. At age 13 the meaningful factors are: verbal, memory, visualization, spatial, and 2 reasoning factors. At age 11 verbal, spatial and memory are revealed. At age 9 memory remains stable. A verbal and a reasoning factor, characterized by items different from those of higher ages, appear. A spatial factor similar to that of year 11 is found. At age 7 the memory, reasoning and verbal factors are similar to those of year 9. No evidence is found for a general factor. - M. O. Wilson.

3213. Keir, Gertrude. (U. Coll., London, Eng.) The progressive matrices as applied to school children. Brit. J. Psychol., Statist., Sect., 1949, 2, 140-150.-A preliminary study of the Matrix test has been completed with approximately 300 children whose ages range from 10 to 14. The reliability of the test when used for children appears to be in the neighborhood of .70, and is thus even lower than its reliability with adults. Judged by its correlation with other tests, its validity is also lower than has been claimed. In regard to relative difficulty, the test-items are less evenly spaced than those of the Binet scale. The test appears to contain too many items of medium difficulty. A factor analysis of the intercorrelations between the items shows that the test as a whole is more homogeneous than the Binet scale, although its general factor contributes less to its total variance.-G. C. Carter.

3214. Modell, Arnold H., & Potter, Howard W. Human figure drawing of patients with arterial hypertension, peptic ulcer, and bronchial asthma. Psychosom. Med., 1949, 11, 282-292.—Drawings from 32 patients with hypertension, peptic ulcer, and bronchial asthma were interpreted in accordance with Machover's formulations. Certain drawing features were felt to occur more often than one would expect by chance. The Machover Human Figure Drawing Test is believed to be well suited to psychosomatic studies .- J. W. Bowles, Jr.

3215. Partington, John E. (VA Regional Office, Roanoke, Va.) Detailed instructions for administering Partington's Pathways Test. Psychol. Serv. Center J., 1949, 1, 46-48.—More detailed instructions for administering Part II as well as a minor change in the instruction for administering Part I of the Partington's Pathways Test are presented. These instructions supersede the original ones which were published in the Psychological Service Center Bulletin, March, 1949.-H. Feifel.

3216. Rimoldi, Horacio J. A., Velasco, Emma Susana; de San Martin, Raquel, & Bührer, Lydia.

Tipificación de los "Progressive Matrices" de Raven. (Standardization of the "Progressive Matrices" of Raven.) Publ. Inst. Psicol. Exp. Univ. Nac. Cuyo, 1947, 2, 1-24.—The results of the administration of the tests called "Progressive Matrices" of Raven to 1680 subjects, ages 9-15, are presented. Statistical analysis indicates similarity with the results of previous work (1945) of the author, and with those of Raven himself. The authors recommend the "Progressive Matrices" of Raven as a very good test that should be used more extensively. 8 references.—A. Manoil.

3217. Stein, Morris L (U. Chicago, Ill.) The record and a sentence completion test. J. consult. Psychol., 1949, 13, 448-449.—This communication is intended to correct any erroneous impressions which may have resulted as a consequence of Miss Rohde's article, (see 22: 4956), on the history of sentence completion tests since the beginning of

World War II.-S. G. Dulsky.

3218. Symonds, Percival M. (Teachers Coll., Columbia U., New York.) New directions for projective techniques. J. consult. Psychol., 1949, 13, 387-389.—This is an introductory article to seven papers that describe new projective techniques. These techniques were devised by the author's students as class assignments. From studying over 225 original projective techniques the author has drawn two conclusions: (1) the simpler the stimuli, the more successful they seem to be in eliciting fantasy; (2) sometimes stimuli that depart from reality are particularly valuable in eliciting untrammelled fantasy material.—S. G. Dulsky.

3219. Uribe Cualla, Guillermo. El psico-diag-nóstico de Rorschach, applicado al estudio de la personalidad del delincuente. (The Rorschach psychodiagnostic, applied to the study of the personality of the delinquent.) Bogotá, República de Colombia: Imprenta Nacional, 1948. 85 p.—This work pre-sented to the First National Congress of Legal Medicine of the Republic of Colombia reviews: (1) the history of the Rorschach test; (2) its applications; (3) observations on its use in psychodiagnosing 33 criminal cases (1944-1947) at the Institute of Legal

Medicine, Bogotá.- F. C. Sumner.

3220. Wittenborn, J. R. (Yale U., New Haven, Conn.) An evaluation of the use of Bellevue-Wechsler subtest scores as an aid in psychiatric diagnosis. J. consult. Psychol., 1949, 13, 433-439.— Data from Rapaport's published records are analyzed statistically. It is concluded that among Rapaport's diagnostic groups a profile or scatter pattern analysis of Bellevue-Wechsler subtests is of no greater value as a psychometric supplement to diagnosis than an inspection of the subtests for a few conspicuous instances of failure and relative success.-S. G. Dulsky.

3221. Zulliger, Hans. Résultats psychanalytiques des tests de Rorschach et de Behn concernant une fillette de 15 ans 1/2. (Psychoanalytic results of Rorschach and Behn tests administered to a young girl 15 years old.) Psyché, 1949, 4, 497-512.-

The anamnesis of the case is outlined. The results of the two tests, in tabular form, and the psychoanalyst's report to the family doctor are given. The author points out that the Classical-Rorschach and the Behn-Rorschach in combination sometimes enable the psychoanalyst to make better diagnosis and check the results of one test against the other.—

G. G. Besnard.

(See also abstracts 2910, 2911, 2915, 2916, 2918, 2920, 2921, 2926, 2927, 2928, 2929, 2930, 3111, 3274, 3296, 3307, 3350, 3351, 3405, 3424)

TREATMENT METHODS

3222. Bennett, A. E., & Engle, B. (U. Nebraska, Lincoln.) Psychiatric nursing and occupational therapy. In Spiegel, E. A., Progress in neurology and psychiatry, 1947, (see 24: 3261), 491-499.—The shortage of psychiatric nurses and their importance to the patient is emphasized anew with the end of the war. Good occupational therapists and programs going beyond "busy work" can be of material aid at this time. Many new types of activities are listed.—C. E. Henry.

3223. Ebaugh, Franklin G. (U. Colorado Sch. Med., Denver.) Evaluation of interviewing technics and principles of psychotherapy for the general practitioner. J. Omaha clin. Soc., 1948, 9, 29-35.— For the general practitioner planned psychotherapy is discussed under five headings: (1) the relationship between the patient's personality and his illness; (2) the evaluation of the physician's own attitudes toward the patient and toward psychosomatic illness; (3) the patient-physician relationship in therapy; (4) some technics of interviewing; (5) the ways and means of psychotherapy. 20 references.—F. C. Sumner.

3224. Hohman, L. B. (Duke U., Durham, N. C.) Rehabilitation of veterans. In Spiegel, E. A., Progress in neurology and psychiatry, 1947, (see 24: 3261), 518-524.—The transition period between war and peace covered by this review does not permit accurate evaluation of the real scope of this problem. Among procedures being used are narcosynthesis, subshock insulin, group psychotherapy, total push and emotional desensitization.—C. E. Henry.

3225. Keet, Charles Douglas. Two verbal techniques in a miniature counseling situation. Psychol. Monogr., 1948, 62(7), vi, 55 p.-Using 30 experimental subjects, the author attempts to distinguish between the effects of free expression in a permissive environment and free expression augmented by an interpretive material designed to make the client aware of the etiology of his conflicts and attitudes. Experimentally frustrating situations are produced by using stimulus words with noxious connotations selected for each subject on the basis of responses to Jung's word association test. The noxious stimuli words were placed among non-emotionally disturbing words which the S was required to memorize and frustration produced by the S's inability to recall the words in which an emotional block was present. On the basis of this experiment the author concludes that "the combined use of expressive and interpretive methods proved consistently superior to the expressive method used alone" in overcoming the experimentally induced neurotic state.—M. A. Seidenfeld.

3226. Monroe, Ruth L. (Greenwich (Conn.) Pub. Schs.) Diagnosis of learning disabilities through a projective technique. J. consult. Psychol., 1949, 13, 390-395.—Pictures of children (selected from magazines) mounted to look like photographs are presented to the subject. The subject chooses the picture for his own story. He is asked to pretend that the child in the picture is having difficulty with his school work and to compose a story explaining the origin and nature of the child's trouble. Several protocols are presented and analyzed. Children who have learning disabilities, when asked to interpret similar difficulties of other children represented pictorially, project parts of their own past history.—S. G. Dulsky.

3227. Murdock, H. M. (Sheppard & Enoch Pratt Hosp., Towson, Md.) Some aspects of treatment in emotional illness. Wis. med. J., 1949, 48, 235-239.— Two steps are stressed in the treatment of emotional illness: (1) discovery of obstacles standing in the way of the patient's getting along in that more or less comfortable fashion which we consider normal; (2) allowing the patient to vent himself in good patient-doctor relationship. The author is opposed to attempts of some psychotherapists to make a sweeping reorganization of the patient's personality for reasons stated.—F. C. Sumner.

3228. Nicole, J. Ernest. Psychiatric rehabilitation in hospital. Practitioner, 1949, 163, 533-540.— The modern tendency of placing a heavy emphasis on special treatments such as drug and shock therapy leads at times to an underestimation of the fact that the main and most widely applicable therapy at our disposal is still rehabilitation in its broadest sense. The scope of psychiatric rehabilitation in hospital, the organization of it, and general arrangement are briefly described. Under rehabilitation and resocialization of the psychiatric patient are itemized: (1) activities best carried out in small groups, on a definite planned timetable, with varying proportions of each activity; (2) activities open to large groups of patients from all over the hospital; (3) amenities and arrangements on general lines.— F. C. Sumner.

3229. Pepinsky, Harold B. (Washington State Coll., Pullman.) An experimental approach to group therapy in a counseling center. Occupations, 1949, 28, 35-40.—The need for research in the outcomes of therapy rather than the processes of therapy is indicated and the experimental approach to the study of group counseling at Washington State College is described. It is concluded that group therapy research in a counseling center is practical and practically.—G. S. Speer.

3230. Slavson, S. R., & Scheidlinger, S. (Jewish Board of Guardians, New York.) Group psychotherapy. In Speigel, E. A., Progress in neurology and

psychiatry, 1947, (see 24: 3261), 473-490.—This paper reflects the growing use of group psychotherapy with civilian mental patients, veterans and military patients, criminals and children. Some technique is described, with evolution of the role of leader and participant.—C. E. Henry.

3231. Smith, Donald S., & Hawthorne, Mary E. Psychiatric rehabilitation; a follow-up study of 200 cases. Nav. med. Bull., Wash., 1949, 49, 655-669. Information was obtained by letter from 200 patients discharged from hospital after a balanced rehabilitation program at a U.S. Naval Hospital. Personal interviews in "over 20 cases" were used to validate letter replies. The follow-up period ranged from 9 to 27 months with an average of about 16 months. The authors evaluate the "action" part of the program (athletics) as most effective with opportunity for verbal expression secondary and stimulation of thinking by group psychotherapy as having been the least beneficial. 19 men were still on active duty and and an additional 123 were making adequate civilian adjustment. 27 men had required further hospitalization, 117 were receiving disability pensions. 118 men evaluated the treatment as excellent, 66 reported it was good, and 11 said the rehabilitation was poor. -W. Fleeson.

3232. Spiel, Lena. Aha-Erlebnis und Therapie. (Aha-experience and therapy.) Int. Z. Indiv.-Psychol., 1948, 17, 184-185.—The report of dream material resulted in a sudden insight, an "aha" experience of the patient. This was of crucial importance in the therapy and assured a successful continuation.—C. T. Bever.

3233. Wilcox, P. H. (Traverse City (Mich.) State Hosp.) Shock therapy. In Spiegel, E. A., Progress in neurology and psychiatry, 1947, (see 24: 3261), 435-460.—Following a review of 144 papers for 1946 dealing with all types of shock therapy it is concluded that "shock therapies provide the psychiatrist with a means for producing dramatic improvement in many cases of mental illness, but they are fraught with dangers which, however, can mostly be avoided if the treatments are carefully adapted to the individual needs of the patient."—C. E. Henry.

(See also abstract 3334)

CHILD GUIDANCE

3234. Arnold, Mildred. (U. S. Children's Bur., Washington, D. C.) The scope and responsibility of public child welfare services. Child. Bur. Publ., 1949, No. 327, 1-4.—Child welfare services are directed primarily to helping children whose normal social resources have not been provided or have broken down. Skilled case work, increased social recognition of the value of a public service career, recognition that these services must be kept close to community life, sufficient coverage throughout the country, tools to work with (health facilities, mental hygiene clinics, etc.) are essential to this service.—L. H. McCabe.

37.35. Chang, Teh-Shiu. Child guidance in China. Sch. & Soc., 1948, 68, 124-126.—The postwar period in China is a new era due to large scale migrations, disorganization of community life, modification and loss of old sanctions, and the stresses and strains of war. The children have suffered greatest hardship. To meet this need the Chialin Home housing several hundred children of all ages and both sexes was established. Two major facilities are provided: (a) mental recreation for crippled children and (b) play therapy for the problem children.—R. S. Waldrop.

3236. Cortez, F. La maison d'enfants. (The children's home.) Enfance, 1948, 1, 232-239.—The first "Children's Home" was opened during the war with the object of combatting the physiological misery of young Parisians. At first, the preoccupations were alimentation and physical hygiene. Soon the work of the institution had to embrace the management of psychic disequilibration, maladjustments, disturbances of character and of behavior. The operation of the institution is described.—F. C. Sumner.

3237. Davidson, E. Rita. Play for the hospitalized child. Amer. J. Nurs., 1949, 49, 138-141.—The obligation of the hospital to provide for emotional care of its child patients in the matter of a play program, play materials, a nursing staff adequate for the patient load, and a director of the play program is stressed. A chart is provided which indicates play materials and types of play especially adapted for use with the hospitalized child. Such a play program should aim toward helping the child to make better adjustment in the hospital and to lessen the possibility of permanent emotional trauma as a sequel to physical illness.—F. C. Sumner.

3238. Deuel, Elizabeth W. (U. S. Children's Bur., Washington, D. C.) The content of social services for children. Child. Bur. Publ., 1949, No. 327, 5-19.—In regard to social services for children who require special attention beyond that provided by their parents, day and Sunday school teachers, family physicians, and the normal contacts that touch the lives of all children the author discusses just who these children are, who is responsible for meeting their needs, what kind of services must be provided, how state responsibilities and local services mesh, and what it takes to get social services to these children.—L. H. McCabe.

3239. Hinds, E. (Bellevue Hosp., New York), & Bender, L. Child psychiatry. In Spiegel, E. A., Progress in neurology and psychiatry, 1947, (see 24: 3261), 382-393.—The 46 papers reviewed for 1946 illustrate the interest in developmental studies, investigative techniques, organic and functional syndromes and the important problem of therapy.—C. E. Henry.

3240. McGovern, Cecelia. Services to children in institutions. Washington, D. C.: National Conference of Catholic Charities, 1948. xiii, 452 p.—In this appraisal of the child-caring institution in relation to the social welfare program of the community the human aspect of the institutional situa-

tion is stressed. The organization and the conduct of an integrated institutional program are developed in the light of the recent general acceptance of the necessary role of the child-caring institution. There is discussion of the institutional functions of the several specialists, and of the qualifications and responsibilities of the house parent. The educational, recreational, and religious aspects of the institutional program are presented. Special attention is given to problems of discipline. The illustrative material is drawn largely from Catholic institutions.—R. C. Strassburger.

3241. Mann, Edna B. You should have my Leonard! Understanding the Child, 1949, 18, 118-123.—This is a case history account of the changes effected by a Guidance Bureau with a boy who was excessively obese, a bully, and who suffered from enuresis. Although bright, he did poorly in all his school work. The mother and the teacher cooperated with the guidance worker in helping Leonard to recognize both his needs and his potentialities.—C. Schmehl.

3242. Proctor, Donald F. (Johns Hopkins Med. Sch., Baltimore, Md.) Preventing deafness in children. Amer. J. Nurs., 1949, 49, 45-46.—The work of a clinic for the prevention of deafness in children opened in 1943 at Hagerstown, Md., is described. Its functions include case finding, clinic examinations, treatment, and speech and hearing rehabilitation.—F. C. Sumner.

3243. Sperling, Melitta. The handling of mothers of children with psychosomatic disorders. Psychosom. Med., 1949, 11, 315.—Abstract.

(See also abstracts 3119, 3289, 3328, 3412)

VOCATIONAL GUIDANCE

3244. Anderson, Rose G. (Psychological Corporation, New York,) Reported and demonstrated values of vocational counseling. J. appl. Psychol., 1949, 33, 460-473.—The post-war adjustment counseling program in an industrial concern is described. Returns from 685 out of 1086 questionnaires indicate that significant positive values resulted from the counseling. More favorable attitudes were expressed by employees who had left the plant than by those still employed, and by women than by men. Further analyses are made for age, education, tested ability, counselee's comments. A follow-up study of veterans' placement showed that 82.4% were satisfactorily placed.—C. G. Browne.

3245. Christensen, Thomas B. (Worcester (Mass.) Public Schools.) Functions of occupational information in counseling. Occupations, 1949, 28, 11-14.—The diagnostic, instructional, distributional and therapeutic functions of occupational information are briefly reviewed. It is concluded that occupational information is effectively used in counseling when the client is directed to specific informational sources and reports his reactions to this material to the counselor.—G. S. Speer.

3246. Failor, Clarence W., (U. Colorado, Boulder.) & Isaacson, Lee E. The veteran evaluates counseling. Occupations, 1949, 28, 18-24.—An analysis of 658 questionnaire responses by veterans counseled in the period 1945-1947 indicates that the veterans feel the process is ably administered, professionally handled, and of considerable personal value. The weakest part of the counseling was felt to be in occupational information.—G. S. Speer.

3247. Leonard, Regis J. (Duquesne U., Pittsburgh, Pa.) Occupational experiences of trade school graduates. Occupations, 1949, 28, 28-31.—A study of 123 graduates of vocational high schools, approximately one year after graduation, shows that less than one third were employed in the trades for which they were trained, and less than one half were employed in the trade field for which they were trained. The need for more adequate vocational guidance and placement is indicated.—G. S. Speer.

3248. Rodger, Alec. (U. London, Eng.) Symposium on the selection of pupils for different types of secondary schools. VIII. An industrial psychologist's point of view. Brit. J. educ. Psychol., 1949, 19, 154-159.—Any feasible program for secondary school allocation must take account of administrative problems and political realities, as well as embody technically sound procedures and principles. A related instance of limitation of the technical scope of the guidance program of the Youth Employment Service because of political considerations bears out this view. Solution of the difficulty demands educating public opinion as to the extent and nature of information essential to effective vocational guidance.—R. C. Strassburger.

3249. Speer, George S., (Illinois Institute of Technology, Chicago.) & Jasker, Leslie. The influence of occupational information on occupational goals. Occupations, 1949, 28, 15-17.—The occupational choices of 107 young men, aged 19 to 27 are considered in terms of suitability and source of occupational information before and after counseling. It is concluded that the suitability of occupational goals is improved by work experience or guided reading discussed with a counselor. The best choices appear to be made when work experience is combined with supervised reading of occupational information.

—G. S. Speer.

BEHAVIOR DEVIATIONS

3250. Durandin, Guy. Contribution à l'étude psychologique de l'évasion chez les prisonniers de la guerre 1939-1945; les difficultés psychologiques de l'évasion. (Contribution to the psychological study of escape among prisoners of war 1939-1945. Psychological difficulties in escape.) Rev. franç. Psychanal., 1949, 13, 228-256.—Generally speaking, the indeterminate presents pragmatic difficulties since it eliminates the possibility of utilizing habits; in an unknown situation the least act necessitates decision; automatic responses no longer function. The spirit is entirely mobilized and therefore be-

comes exhausted; this accounts for the depression following attempted escape. The worst aspect of solitude is the loss of socially-induced conventionally operating habits, allowing for too extensive choice and the production of anxiety. The escapee experiences guilt based on an individual act which removes him from the common destiny and on his disobedience of the law of a beneficent enemy forbidding escape.-G. Rubin-Rabson.

3251. Folch-Pi, Jordi. The problem of basic research in neuropsychiatry. J. nerv. ment. Dis., 1949, 110, 534-537.—Abstract and discussion.

3252. Freudenthal, Kurt. (V.A., Baltimore, Md.) Participation of the community agency in hospital discharge planning. J. soc. Casewk, 1949, 30, 421-426.—The need for a correlation of efforts between the mental hospital and the organized social work community is pointed up. Out of this need, a specific program of cooperative discharge planning was evolved. Joint evaluation and responsibility were part of the single casework plan which is illustrated.—V. M. Stark.

3253. Greenhill, M. H. (Duke U., Durham, C.) General clinical psychiatry. In Spiegel, N. C.) General clinical psychiatry. In Spieges, E. A., Progress in neurology and psychiatry, 1947, (see 24: 3261), 349-369.—The 56 papers covered in this review deal with a variety of clinical data (much chemical and psycho-therapies, physiological studies, mental deficiency and organizational trends in psychiatry.—C. E. Henry.

3254. Guez, Geneviève. Les conditions intellectuelles et affectives de l'oedipe. (Intellectual and emotional aspects of the oedipus phase.) Rev. franç. Psychanal., 1949, 13, 256-276.—Fears and anxieties, especially of abandonment, in the pre-oedipus phase may check the growth of the intellectual and emotional factors essential for the normal evolution of the next stage. The adult male neurotic of the pre-oedipus type is incapable of amorous rivalry, demanding instead added maternal ministrations of a faithless wife. The oedipus phase is an amazing natural device to transform the rival into the model; without this man would remain in a state of pugnacious and regressive rivalry. The patient is less threatened by the incest implications of an oedipus involvement than by the shame of a deep infantilism. -G. Rubin-Rabson.

3255. Kubie, Lawrence S. (New York Psycho-calytic Institute.) The neurotic potential and analytic Institute.) human adaptation. In Romano, J., Adaptation, (see 24: 2890), 77-96.—Adaptation cannot be the sole criterion of normality. "It is not what we do but why we do it, which in the ultimate analysis determines normality." The "why" may be normal or neurotic. Neurotic reasons for behavior, determined by unconscious processes, are rigid and inflexible; while normal conduct, determined by conscious processes, is flexible and realistic. The unconscious processes are greatly influenced by childhood experience. The prevention of neurotic behavior requires that "we should attempt in every way that

is possible to extend the area of conscious motivation and purpose and control in human life . . . "-C. M. Louttit.

3256. Lundquist, Gunnar. Psykiatriens grundbegrepp. (Fundamental concepts of psychiatry.) In Sjöstedt, C. E., Problem i den moderna psykologien. (See 24: 2903), 54-69.—The methodology of psychiatry has similarities with the natural sciences and also with the social sciences. The concepts of neurosis and psychosis are defined and it is pointed out that psychiatry is concerned with the psychosomatic relationships involved in illness. Behavior is defined as the function of the individual in his social environment: B = f(I, M); however, to a certain extent, behavior may be considered either environmentally or constitutionally conditioned. Sjöbring's constitutional psychology is discussed at length .- A. Tejler.

3257. Olsen, Clarence W. (9629 Brighton Way, Beverly Hills, Cal.) Procaine as an autonomic drug. J. nerv. ment. Dis., 1949, 110, 395-399.—"Procaine hydrochloride (novocain) presents new possibilities for therapy when administered intravenously. The clinical evidence for an action on the structures bordering on the third ventricle and aqueduct is presented. Some encouraging but inconsistent effects are reported, resulting from intravenous injections of novocain in psychoneurotic and psychotic patients."- N. H. Pronko.

3258. Orr, Douglass W. Psychiatric uses of sodium pentothal, experiences in a forward area. Nav. med. Bull., Wash., 1949, 49, 508-516.—Intravenous sodium pentothal was given to a number of battle casualties with anxiety states, psychotic reactions, and suspected malingerers. This treatment was given for the purpose of reconstructing and ventilating traumatic emotional experiences. 6 cases are reported in some detail. This treatment was done aboard a casualty evacuation ship in a combat area. The author discusses both the dynamics of the patients and the problems involved in such treatment under these conditions .- W. Fleeson.

3259. Overholser, Winfred. (St. Elizabeth's Hosp., Washington, D. C.) Forensic psychiatry. In Spiegel, E. A., Progress in neurology and psychiatry, 1947, (see 24: 3261), 377-381.—This review stresses the slow but still appreciable progress being made in this field, with increasing interest on the part of the legal profession.—C. E. Henry.

3260. Richter, Curt P. (Johns Hopkins U., Baltimore, Md.) The use of the wild Norway rat for psychiatric research. J. nerv. ment. Dis., 1949, 110, 379-386.—"The Norway rat . . . gives us an excellent opportunity to work out the broad principles involved in the process of domestication, especially in so far as this process concerns behavior. Furthermore this animal provides information that may help us to understand and deal with human problems that have their origin in man's reactions to society's efforts to domesticate him."- N. H. Pronko.

3261. Spiegel, B. A. [Ed.] (Temple U., Philadelphia, Pa.) Progress in neurology and psychiatry: an annual review. Vol. 2. New York: Grune & Stratton, 1947. xii, 541 p. \$7.00.—The book is divided into 4 parts: basic sciences, clinical neurology, neurosurgery and psychiatry, the last having been somewhat enlarged. Reviews cover the period from December, 1945, to December 1, 1946. Individual chapters are abstracted separately in this issue.—C. E. Henry.

3262. Wilson, Henry. (London Hosp., London, Eng.) Mental disorders in adolescence. Practitioner, 1949, 162, 305-312.—The mental disorders most often met with in adolescents are: psychopathic personality; mental deficiency; suicidal threats and gestures; fugues; depressions; excitements; schizoid and schizophrenic states; neurotic and psychosomatic disorders. Each is briefly discussed.—F. C. Sumner.

3263. Zimmerman, Kent A. The importance of the family in the prevention of mental illness. Milbank Mem. Fund Quart., 1949, 27, 133-142.— Over against psychological tendencies of tracing so much of mental illness to the family, the author argues that companionship and adaptability of the American family actually makes for the prevention of mental illness.—F. C. Sumner.

(See also abstract 3191)

MENTAL DEFICIENCY

3264. Cassel, Robert H. (Training School, Vineland, N. J.) Relation of design reproduction to the etiology of mental deficiency. J. consult. Psychol., 1949, 13, 421-428.—The Ellis Visual Designs test was administered to 25 endogenous and 25 exogenous mental defectives. The exogenous group was inferior in reproducing the designs from copy. Therefore, the conclusion that the exogenous group does poorly in drawing designs from memory must be interpreted with caution. The poorer performance of the exogenous group may not be altogether due to poor memory, but rather to inability to reproduce the designs from copy.—S. G. Dulsky.

3265. Robalinho Cavalcanti, L. Mongolismo e dismorfia mongoloide. (Mongolism and mongoloid dysmorphy.) Rev. Centro psiquiát. nac., Rio de J., 1946, 1, 33-38.—An analysis of mongolism supplemented by 4 cases, one in an adult and 3 in children, is presented. The fourth of these cases comes from a family of 8 children, each one presenting a certain deficiency; moreover, the child was born when the mother was 38 years old. 20 references.—A. Manoil.

3266. Zazzo, René, & Boivin, Paulette. Comparaison des écoliers normaux aux adultes débiles de même age mental. (Comparison of normal pupils with defective adults of the same mental age.) Enfance, 1948, 1, 248-249.—100 defective adolescents and adults (mean MA, 9 yrs.) were compared with 160 children (MA, 9 yrs.) as to item performance on the Binet-Simon Scale. The defective adolescents and adults showed a significantly higher percentage of successes on certain enumerated items.

It appears that certain logical activities such as the criticism of absurd sentences are connected with verbal habits and with concrete experiences much more than with true intellectual superiority. The most interesting indication is the superiority of normal children in all the tests which require great rapidity of association, and especially organizational activity.—F. C. Sumner.

BEHAVIOR PROBLEMS

3267. Allen, E. B., & Prout, C. T. (New York Hosp.) Alcoholism. In Spiegel, E. A., Progress in neurology and psychiatry, 1947, (see 24: 3261), 416-424.—New social, economic and psychiatric studies on alcoholism are reviewed as are insulin and conditoned reflex therapy studies.—C. E. Henry.

3268. Golla, F. L. (Burden Neurological Institute, Bristol, Eng.) Hormone treatment of the sexual offender. Lancet, 1949, 256, 1006-1007.—Finding that libido was temporarily abolished in 13 males receiving injections of oestrone or oestradiol, and in view of the non-mutilating nature of this treatment and the ease with which it can be administered to a consenting patient, it is believed "that it should be adopted whenever possible in male cases of abnormal and uncontrollable sexual urge."—A. C. Hoffman.

3269. Keschner, Moses. Simulation (malingering) in relation to injuries of the brain and spinal cord and their coverings. In Brock, S., Injuries of the brain and spinal cord and their coverings, (see 24: 3329), 390-419.—Malingering is regarded as a wilful and deliberate attempt to imitate or exaggerate illness for a consciously desired end, whereas psychoneurosis is essentially an unconscious process. Nearly the whole of the chapter is devoted to a large number of tricks which will expose malingering, whether of paralyses, epilepsy, motor disturbances, sensation, coordination, speech or any of the special senses. 12 references.—C. E. Henry.

3270. Mahler, Margaret S. Psychosomatic aspects of tic. Psychosom. Med., 1949, 11, 315.—Abstract.

3271. Manson, Morse P. (Birmingham V.A. Hosp., Van Nuys, Calif.) A psychometric determination of alcoholic addiction. Amer. J. Psychiat., 1949, 106, 199-205.—A pencil-and-paper test to assist in the identification of the alcoholic addict is described. It was found that a subjective analysis of the 60 items on the Alcadd Test revealed 5 characteristics of the alcoholic. Using the shorter approximation of the Richardson-Kuder formula, a coefficient of reliability of .92 was found for the males and .96 for the females.—D. E. Walton.

3272. Marcussen, Robert M., & Wolff, Harold G. A formulation of the dynamics of the migraine attack. Psychosom. Med., 1949, 11, 251-256.—With 2 Ss a psychological stress situation induced predictable and typical migraine attacks. A situation eliciting intense anger and frustration was employed following a period of increasing fatigue, resentment, and tension. The attacks were relieved by the

administration of ergotamine tartrate. The migraine attack is viewed as a phase of an inappropriate protective or adaptive reaction involving cranial circulatory apparatus.—J. W. Bowles, Jr.

3273. Nacht, S. Clinical manifestations of aggression and their role in psycho-analytic treatment. Int. J. Psycho-Anal., 1948, 29, 201-223.—Part I, Introduction, develops the thesis that aggression sets up greater conflicts than other drives. Part II, Clinical survey, presents a variety of clinical manifestations of aggression. Part III, Therapeutic and preventive aspects, discusses techniques for handling aggression in analysis and their transformation into a constructive force through arrangement of proper mother-child relationships.— N. H. Pronko.

3274. Simon, Werner (V.A. Hosp., Minneapolis, Minn.), & Hales, William M. Note on a suicide key in the Minnesota Multiphasic Personality Inventory. Amer. J. Psychiat., 1949, 106, 222-223.—Fifty MMPI profiles of patients of various diagnostic classifications with clinically established suicidal preoccupation were studied in terms of psychasthenia coupled with depression. A consistent rise was found on the D and Pt scales and of which an analysis revealed some of the preoccupations and emotional conflicts of these suicidal patients. Four brief case histories are cited for illustration. The authors point to the value of a suicide key with the MMPI as the instrument.—R. D. Weitz.

3275. Solomon, Philip. The use of plasma in the treatment of combat fatigue. Nav. med. Bull., Wash., 1948, 48, 226-228.—The division psychiatrist to a Marine unit in combat wrote this note while combat operations were still under way "on an island in the Orient." 32 patients were given 1 unit of plasma on admission to the field hospital, 8 were controls. 40 men returned to full duty in 3 days. 30 or 40 more cases also received plasma at aid stations. Patients and medical officers feel the procedure is helpful but there is no scientific proof of its value.—W. Fleeson.

3276. Sorge-Boehmke, Elisabeth. Aus einem Flüchtlingsleben. (From the life of a displaced person.) Int. Z. Indiv. Psychol., 1948, 17, 179-184.— The symptoms of a seclusive, hostile, twelve-year-old Polish farm boy appeared to be due to his experiences as a displaced person. Investigation revealed that his over-protective mother had reared him in isolation even in their old home and that he was not properly prepared for communal living. The hardships of refugee life had upset the equilibrium of this self-centered, ambitious boy, but even at home he would have gone increasingly the road of isolation, of pronounced egocentricity.—C. T. Bever.

3277. Veit, Henry. (Veterans Mental Hygiene Clinic, Milwaukes, Wis.) The sex deviate problem in Wisconsin. Wis. med. J., 1949, 48, 511-513.—The Wisconsin laws dealing with the diagnosis and therapeutic handling of the sex deviate are stated. The sex deviate manifestation is regarded under the law as a symptom, not a disease entity. Early in-

formative guided sex instruction is important as a preventive.—F. C. Sumner.

(See also abstract 2924)

SPEECH DISORDERS

3278. Blocker, T. G., Jr., & Blocker, Virginia. (U. Texas, Galveston.) Speech training for cleft palate children. Austin, Tex.: U. Texas Press, 1948, 43 p.—This pamphlet has been prepared for parents of cleft palate children. Instructions and procedures are given for speech therapy to be begun even before surgery has been completed. Although surgery is now usually performed at two years of age, the child has already acquired speech habits which are difficult to change. Diagrams, instructions for articulation of vowels and consonants, test sentences, exercises for lips and palate are included.—H. R. Myklebust.

3279. Greene, James S. (National Hospital for Speech Disorders, New York.) Speech rehabilitation following laryngectomy. Amer. J. Nurs., 1949, 49, 153-154.—The most important aspect of the patient's rehabilitation following laryngectomy is his emotional reaction to loss of voice which can seriously obstruct progress in developing compensatory speech. The value of reassurance, of teaching by persons who have first hand knowledge of the patient's problems, of voice training away from the hospital in which the operation was performed, and of group therapy for relieving the post-operative depressions is discussed.—F. C. Sumner.

3280. Rumsey, H. St. John. (Guy's Hosp., London.) Speech therapy. Lancet, 1949, 256, 925.

—Age- and sex-incidence (in %) of various types of speech defect (also age and sex incidence in the case of stammering) are presented as observed in clinical practice.—A. C. Hoffman.

3281. Zerffi, William A. C. Voice re-education. Arch. Otolaryng., Chicago, 1948, 48, 521-526.—The functions of the otolaryngologist in educating or reeducating the speaking and singing voice are reviewed.—A. C. Hoffman.

CRIME & DELINQUENCY

3282. Abrahamsen, David. (Columbia U., New York.) Family tension, basic cause of criminal behavior. J. crim. Law Criminol., 1949, 40, 330-343.—A research project lasting 4 years which investigated the psychosomatic factors in antisocial behavior of members in 29 families revealed the existence of unwholesome conditions within the home and intense physical disturbances among the family members. Statistical proof and results are given.—V. M. Stark.

3283. Altus, William D., & Clark, Jerry H. (Santa Barbara Coll., Calif.) Subtest variation on the Wechsler-Bellevue for two institutionalized behavior problem groups. J. consult. Psychol., 1949, 13, 444-447.—The W-B Intelligence Scale was administered to 84 prisoners in an Army Disciplinary Barracks and to 53 institutionalized juvenile de-

linquents. Subtest patterning is remarkably similar for both groups. Performance scale IQ's were significantly higher for both groups. It is concluded that these findings corroborate the statements of Wechsler in describing the subtest patterning obtained from adolescent psychopaths.—S. G. Dulsky.

3284. Cavanagh, John R., & Gerstein, Samuel. (U. S. Naval Disciplinary Barracks, Portsmouth, N. H.) Group psychotherapy in a naval disciplinary barracks; preliminary report. Nav. med. Bull., Wash., 1949, 49, 645-654.—Administrative and therapeutic values of group psychotherapy in a disciplinary institution are discussed briefly. Various criteria were used to select 4 groups of 10 men each. The authors conclude that the optimal size of groups is 10 men, groups should meet twice a week for 2 months, and that the participants should be carefully selected by individual psychiatric interviews on the basis of need and suitability for treatment. "The active and semidirective approach appears to be the most effective." The men were considered to be improved as judged by their own statements and by the evaluation of supervisors.—W. Fleeson.

3285. Gagnieur, J. P. (Judicial Courts of Paris, France.) The judicial use of psychonarcosis in France. J. crim. Law Criminol., 1949, 40, 370-380.

—The aim of psychonarcosis in judicial court is not to obtain confession, but to find out if the offense has left traces in the memory and subconscious of the examined person. The practical consequences of its judiciary use has been to reveal the sincerity of individuals, as well as, to bring to light the schemes of malingerers.—V. M. Stark.

3286. Henriques, Basil L. G. (St. George's Jewish Settlement, London, Eng.) The adolescent delinquent boy. Practitioner, 1949, 162, 299-304.—Causal factors behind the adolescent delinquent boy of average mental ability and not of certified psychopathic personality are seen to be of an environmental nature: poor or inconsistent home training; broken homes; absence of character training in the school; lack of interest in work when school has been left; lack of provision in the community for wholesome use of leisure. These factors are viewed by the author as remediable and the outlook for the adolescent is considered a good one.—F. C. Sumner.

3287. Johnston, William C. B., & Otness, H. Robert. A study of 200 violators of general court-martial probation. Nav. med. Bull., Wash., 1948, 48, 81-92.—Basis for the study was data obtained from questionnaires completed by the offenders and observations by members of the psychiatric office. 12 tables show distribution by home state, religion, age, educational achievement, civilian delinquencies, marital status, navy ratings and length of service, types of duty, reasons given by the men for violation of probation, and disposition. Psychiatric evaluation indicated that 88% were unfit for further duty. The authors suggest, on the basis of replies to the questionnaire, that unstable individuals with marital problems, history of repeated offenses in civil life

and in the Navy should not be restored to duty especially if educational record has been poor, there is lack of personal ambition, neurotic symptoms, and a poor attitude to the Navy.—W. Fleeson.

3288. Locke, Bernard, & Cornsweet, Albert C. The Naval Personal Inventory and the naval offender. Nav. med. Bull., Wash., 1949, 49, 289-295.—The Naval Enlisted Personal Inventory was administered to 1,239 court martial prisoners in an attempt to evaluate the inventory as a tool for predicting naval delinquencies. If a score of 8 is considered critical on Part 1 (Cornell) of the inventory, 50.2% would be selected; 77.6% checked one or more critical questions on the second part (Shipley) of the inventory. The psychiatric diagnoses for 200 unselected offenders is given as a further check on the validity of the inventory as a screening tool. 118 Negroes scored significantly higher on both portions of the scale. Statistical differences between the group of men awaiting trial and those already sentenced are not explained. The inventory does not aid in predicting the number of naval offenses.—W. Fleeson.

3289. Nutt, Agnes Scott. (U. S. Children's Bur., Washington, D. C.) The juvenile court and the public welfare agency in the child welfare program. Child. Bur. Publ., 1949, No. 327, 20-30.—The following topics are discussed: the concept underlying child welfare services, basic principle of juvenile court law, the court takes on administrative responsibilities, public provisions for child welfare, to each its own function, new alignments for the future, and obligations of social agencies.—L. H. McCabe.

3290. Powers, Edwin. (Cambridge-Somerville Youth Study, Cambridge, Mass.) The school's responsibility for the early detection of delinquency-prone children. Harv. educ. Rev., 1949, 19, 80-86.— Experts' and teachers' predictions of delinquency, made 10 years earlier, for 100 boys, 9 and 10 years old, were substantially similar in accuracy; 87% and 77% respectively of those who become delinquent had been predicted to become so. But most of those labeled pre-delinquent did not become delinquent. The delinquents identified were already obvious to any discerning teachers. Delinquency is but a single part of a large categorization of behavior rising from conflict and maladjustment; therefore, we should not try to isolate the predelinquent and view him as different from other children who are unhappy and inadequate but not delinquent.—A. R. Schmidt.

3291. Safier, Benno; Corrigan, Hazle G., Fein, Eleanor J., & Bradway, Katherine P. (Dept. of Health, San Francisco, Calif.) A psychiatric approach to the treatment of promiscuity. New York: American Social Hygiene Ass., 1949. vi, 81 p. 75 é. (Publication No. A-741.).—A continuation of the study of the application of psychiatric knowledge and techniques to venereal disease control first reported upon in 1945. The present study covers the 4.5 year period from Jan. 1943 through June 1947. Psychologists, psychiatrists, psychiatric social workers and public health workers cooperated in the

clinical study of 365 women and 255 men. It is the opinion of the authors that this project demonstrates the need for psychiatric and case work services within a venereal disease clinic and the values of such services in reducing the spread of venereal disease as well as promoting the mental health of the patients treated. 12 references.—R. D. Weits.

PSYCHOSES

3292. Biddle, W. Earl. (Wernersville (Pa.) State Hosp.) The nurse and "spontaneous" recovery in schizophrenia. Amer. J. Nurs., 1949, 49, 371-372.— Authentic spontaneous recovery in schizophrenia implies that the patient gets well without external influences contributing to the cure. Attention is called to a frequently overlooked external influence in initiating spontaneous recoveries from schizophrenia, namely, the nurses and other hospital workers who have shown personal interest in the patient.—F. C.

3293. Borenz, Harold F. (Mendota State Hosp., Madison, Wis.), Schuster, Daniel B., & Downey, Gladys J. The effect of insulin shock therapy on glucose metabolism in schizophrenia. J. nerv. ment. Dis., 1949, 110, 507-517.—A series of 16 young male schizophrenics was studied through 780 determinations of their tolerance to glucose, insulin, and epinephrine before and after a course of insulin shock therapy. Results showed no prognostication of a clinical improvement of the patient from this type of glucose metabolic study.—N. H. Pronko.

3294. Borsuk, V. N., & Ul'anova, M. G. Bisul'fitsvíazyvaíushchie veshchestva mochi pri nekotorykh porazhenitakh tsentral'nol nervnol sistemy. (Urinary bisulfite-binding substances in certain diseases of the central nervous system.) Trud. fisiol. Lab. Pavlova., 1947, 14, 90-107.-The urine of patients suffering from various psychotic disturbances was analyzed, and the quantity of bisulfite-binding substances (BBS) present calculated in terms of mg-% of pyruvic acid. Traumatic psychoses, associated with organic diseases of the central nervous system, show a definite increase in urinary BBS, that is, avitaminosis B1 is indicated. Penetrating brain injuries without psychosis show signs characteristic of hypovitaminosis B1. The diseases of pellagra and malnutrition lead to decided increase in BBS in the urine whether or not psychosis is in evidence. Subcutaneous injections of vitamin B1 (4 to 5 injections totalling 80-100 mg) eliminated the psychotic state in infectious psychoses and reduced urinary BBS to normal.—I. D. London.

3295. Bowman, Karl Murdock, & Blau, Abram. Psychotic states following head and brain injury in adults and children. In Brock, S., Injuries of the brain and spinal cord and their coverings, (see 24: 3329), 342-389.—This is a reprint of chapter 13 of the previous edition which reviewed the mental sequelae of trauma under the classification of primary effects (acute and chronic) and secondary effects (psychoneurosis, psychosis and mental deficiency). The discussion treats historical factors, incidence,

symptomatology, prognosis and therapy. 68 references.—C. E. Henry.

3296. Dorken, Herbert, Jr., & Tunis, Martin M. (Verdun Protestant Hosp., Montreal, Que.) Projective technique with narcosis. Amer. J. Psychiat., 1949, 106, 216-221.—In evaluating the efficacy of narcosis upon projective technique, intravenous nembutal (0.3 gm) and caffeine sodium benzoate (0.25 gm to 0.5 gm) were administered to 5 cases of schizophrenia prior to Rorschach examination. A detailed analysis of the Rorschach material substantiated narcosis as an aid to the psychological examination of the resistant or inaccessible schizophrenic patient and of value in eliciting underlying psychopathological processes. The diagnostic, prognostic, and therapeutic implications of this method and the possibility of organic brain dysfunction in the patients examined are noted. A tabular outline of the statistical analysis of the Rorschach data is presented. 21 references.-R. D. Weits.

3297. Josephy, Herman. (Chicago (Ill.) State Hosp.) Analysis of mortality and causes of death in a mental hospital. Amer. J. Psychiat., 1949, 106, 185-189.—In choosing for comparison the years 1935-37 and 1945-47, the death rate, expressed as percentage of admissions, has essentially declined for 1945-47 at the Chicago State Hospital. Deaths from exhaustion in the course of acute schizophrenia and those from general paresis have markedly decreased. Delirium tremens as a cause of death has disappeared and malignant tremors seem to be rarer among mental patients than in the general population. More deaths of old age patients in 1945-47 than in 1935-37 is accounted for by the increased influx of senile patients. The author calls attention to the problem as to whether the mental hospital is the right environment for senile patients.—D. E. Walton.

3298. Jossmann, Paul B. Psychosis associated with convulsive disorders. J. nerv. ment. Dis., 1949,

110, 537-540.—Abstract and discussion.

3299. Møller, Else. Nondiabetic glycosuria in chronic schizophrenia. Acta psychiat., Kbh., 1949, 24, 223-250.—After ingestion of sugar by 202 chronic schizophrenics, glycosuria occurs with the same average frequency (25%) as normals. Excited paranoid schizophrenics show a higher frequency. In contrast to normals the frequency of glycosuria was not greater in the 50-59 yrs. age group. Previous shock had no influence on the frequency of glycosuria. Incidence of low threshold and renal glycosuria is lower than for normals. Incidence of other types of nondiabetic glycosuria is the same as for normals. The frequency of abnormal glucose tolerance curves does not differ from normals. Glycosuria may be induced by emotional excitation or by a vegetative disturbance in the case of the excited paranoics. 56 references.—D. Prager.

3300. Papez, James W. (Cornell U., Ithaca, N. Y.), & Bateman, J. F. Cytological changes in nerve cells in dementia praecox. J. nerv. ment. Dis., 1949, 110, 425-437.—Three stages of nerve cell

disease were revealed in the nerve cells in the cerebral cortex of 42 dementia praecox patients, six with manic depressive psychosis and two others with general paresis. Cytological analysis was made of the pieces of prefrontal cortex removed at the time of prefrontal lobotomy.— N. H. Pronko.

3301. Perry, H. A., & Levy, Sol. (Eastern State Hosp., Medical Lake, Wash.) Intravenous alcohol and early convulsive shock in the treatment of exhaustion due to mental disorder. J. nerv. ment. Dis., 1949, 110, 497-501.—"A new method for the treatment of exhaustion due to mental disorder, to our knowledge not previously reported, consisting of intravenous alcohol and early convulsive shock has been described. A series of 18 cases, mainly manic depressive, hyperacute mania and schizophrenia, catatonic excitement state, have been treated with this method and in all but one case the results were excellent. One case of this group was reported in detail."—N. H. Pronko.

3302. Rupp, Charles (Philadelphia (Pa.) Gen'l Hosp.), & Wilson, George. General pathologic findings associated with cases of so-called functional psychoses. J. nerv. ment. Dis., 1949, 110, 419-424.—Necropsy findings are reported for a group of 37 patients, all under 50 years of age and all clinically diagnosed as acute functional psychotics and all dead within two weeks of admission. Postmortem examination showed extensive visceral and neuropathological disease and organic heart disease. These conditions are believed to have contributed to an altered cerebral metabolism which was expressed clinically as a psychosis. Implications of the findings for psychotherapy are discussed.— N. H. Pronko.

3303. Thompson, George N. (1136 W. Sixth St., Los Angeles 14, Cal.), & Nielsen, J. M. The organic paranoid syndrome. J. nerv. ment. Dis., 1949, 110, 478-496.—Two pathologic cases (one showing a "non-recognition of mental disorder" and another the organic paranoid reaction) demonstrate a basis in organic cerebral disease. A third shows the principle of nonlocalized brain injury resulting in paranoia. All are believed to indicate a constitutional predisposition to paranoia that is released by the brain injury, although more marked predispositions may develop into paranoia without cerebral trauma.—N. H. Pronko.

3304. Walsh, John. (Tone Vale Hosp., Taunton, Eng.) Transorbital leucotomy. Lancet, 1949, 257, 465-466.—No definite clinical improvement was observed to follow transorbital leucotomy in 8 psychotic women (in 2, necropsy showed that the white matter of the prefrontal areas was not cut as indicated).—A. C. Hoffman.

(See also abstract 3136)

PSYCHONEUROSES

3305. Carson, James. (Withington Hosp., Manchester, Eng.) & Kitching, E. Howard. Psychiatric beds in a general ward. Lancet, 1949, 256, 833-835.

—The advantages and disadvantages of hospitalizing affective disorders and psychoneuroses in a general medical ward are discussed after a year's experience with over 100 such patients. The patients' reaction was often one of gratitude for having been treated as "normal people."—A. C. Hoffman.

3306. Grinker, Roy R., & Weinberg, Jack. Neuroses following head and brain injuries. In Brock, S., Injuries of the brain and spinal cord and their coverings, (see 24: 3329), 329-341.—This is a new chapter on this topic (see 24: 3309) which summarizes various views about the etiology of such neuroses. Whether psychologic ("ego-drive") or neurologic ("cortical-diencephalic") terminology is used, the fundamental dynamic process is the same. This is viewed as a regression; therapy is thus more important than diagnostic classification. Secondary gain plays a most important role.—C. E. Henry.

3307. Heyer, Albert W., Jr. (U. Colorado, Boulder.) "Scatter analysis" techniques applied to anxiety neurotics from a restricted culturo-educational environment. J. gen. Psychol., 1949, 40, 155-166.—Anxiety neurotic patients in a military hospital were compared on the Wechsler-Bellevue test with a group of normals matched for education, urban-rural, and geographic (southeast United States) backgrounds. No significant differences were found which could support the use of the test for diagnostic purposes with these patients. Comparisons of the results of the two groups by scatter analysis also were unrewarding.—B. R. Bugelski.

3308. Meduna, L. J. (Coll. Med., U. Illinois, Chicago.) A neurophysiological theory of psychoneuroses. J. nerv. ment. Dis., 1949, 110, 438-439.—
The neuroses are interpreted as a failure of homeostasis dependent upon the structures participating in the reverberations between the cortex and lower brain structures, which would make them treatable by purely physical means regardless of their symbolic content.— N. H. Pronko.

3309. Schilder, Paul. Neuroses following head and brain injuries. In Brock, S., Injuries of the brain and spinal cord and their coverings, (see 24: 3329), 298-328.—This is the first of two chapters (see 24: 3306) under this heading, being the previous contribution by the late Dr. Schilder. Case histories are used to illustrate a variety of psychologic reactions to head injury. 48 references.—C. E. Henry.

3310. Spiegel, J. P. (Michael Reese Hosp., Chicago, Ill.) Neuroses. In Spiegel, E. A., Progress in neurology and psychiatry, 1947, (see 24: 3261), 394-402.—The 22 papers reviewed for 1946 reveal the still dominant role of the recent war and its many stresses. There is progress in therapy with particular interest in group therapy.—C. E. Henry.

PSYCHOSOMATICS

3311. Berge, Henry L. Psychosomatic ophthalmology. Sight-sav. Rev., 1949, 19, 202-207.—The term "ophthalmic psychoneuroses" covers (1) ophthalmic psychoneuroses (simulated ocular disease);

and (2) ophthalmopathy associated with psychoneuroses (ocular disease related to psychoneuroses). Simulated eye disease includes such conditions as acute or chronic ocular anxiety neurosis, hysterical blindness, conversion hysteria. Ocular anxiety neurosis is the most commonly seen. Hysterical eye manifestations are described. Respecting eye disease related to psychoneuroses, it is pointed out that the physical defect may be either complicated, or caused, by the psychogenic condition.—K. E. Maxfield.

3312. Casson, F. R. C. (National Hosp., Queen Square, London.) Some interpersonal factors in illness. Lancet, 1949, 257, 681-684.—The effects of reciprocal interactions between the patient and the persons in his immediate environment are discussed. In illness, various degrees of regression to the dependence and inadequacy of childhood take place. Depending on unconscious factors derived from childhood, the doctor is regarded as a father, the nurse as sister or mother. Rivalry or identification with other patients has been noted. The full extent of regression is most clearly observed in the interaction between patient and his family.—A. C. Hoffman.

3313. Dunbar, Alvin; Rosenbaum, Milton, & Crede, Robert. Atopic dermatitis. Psychosom. Med., 1949, 11, 293-299.—A conference on a case of atopic dermatitis is reported. The psychodynamic forces are analyzed and it is indicated that the patient has utilized his chronic dermatitis to discharge tension associated with his psychological conflicts. The skin has become "erotized" as an "organ of expression."—J. W. Bowles, Jr.

3314. Gildea, Edwin F. Special features of personality which are common to certain psychosomatic disorders. Psychosom. Med., 1949, 11, 273-281.— Evidence is presented to support the hypothesis that certain personality patterns are common to specific psychosomatic disorders. For example, subnormal assertiveness and obsessive compulsive trends are most characteristic of hypertension. It is suggested that the effectiveness of psychotherapy in psychosomatic cases varies with the organ system involved.— J. W. Bowles, Jr.

3315. Linn, Louis, & Goldman, Irving B. Psychiatric observations concerning rhinoplasty. Psychosom. Med., 1949, 11, 307-314.—Data from a psychiatric study of 58 rhinoplasty patients are reported. Most of the patients presenting themselves for rhinoplasty were regarded as psychiatrically ill to some extent. A rhinoplastic syndrome deriving from extreme selfconsciousness relating to the nose is reported. Improvement is reported immediately after rhinoplasty. Beneficial fundamental changes may occur although new psychological problems often follow rhinoplasty.—J. W. Bowles, Jr.

3316. Pollak, Alois, & Thompson, George No. Common surgical lesions causing mental disorders. J. nerv. ment. Dis., 1949, 110, 400-412.—Nine cases of mental disorders that appeared to result from

surgically treatable lesions are presented. With surgical treatment of the lesion, there was complete recovery from the mental disturbance in nearly all cases. It is believed that the lesion causes a metabolic disturbance sufficient to disturb the cerebral physiology, a sequence the reverse of such cases as are found in the usual psychosomatic concept.—
N. H. Pronko.

3317. Seguín, C. Alberto. A note on the concept of cure. Psychosom. Med., 1949, 11, 305-306.— According to the author, "a 'cure' can only be declared when all stimuli altering the psychosomatic equilibrium of the organism have been taken into account and the total situation has been favorably modified, thus restoring the equilibrium." This is due to the fact that a disease is a reaction of the organism as a totality. If the pathogenic situation is unaltered the organism uses one or another form to react.—J. W. Bowles, Jr.

3318. Smith, Oma. (Amer. Red Cross, Wiesbaden, Ger.) The medical and psychological problems of infectious hepatitis. J. soc. Casewk, 1949, 30, 426-429.—Infectious hepatitis is a disease that is obviously physical in its manifestations, however, there are emotional components which need treatment by social workers.—V. M. Stark.

3319. Stevenson, Ian P., Duncan, Charles H., Wolf, Stewart; Ripley, Herbert S., & Wolff, Harold G. Life situations, emotions and extrasystoles. Psychosom. Med., 1949, 11, 257-272.—In 12 Ss with extrasystoles life situations were found to be relevant to the occurrences of arrhythmias. Extrasystoles and anxieties were observed during discussions of topics to which the patients were sensitive. Extrasystoles appear to be common in patients with structural heart disease who exhibit prolonged anxiety. They are regarded as indicators of stress on the heart.—J. W. Bowles, Jr.

3320. Szasz, Thomas S. Factors in the pathogenesis of peptic ulcer. Psychosom. Med., 1949, 11, 300-304.—This paper consists of critical comments on an article by Mahl (see 24: 3860). Mahl concluded that the most important factor in the pathogenesis of peptic ulcer was chronic anxiety or fear. This is questioned by Szasz. The latter suggests that the Mahl experiments with dogs did not produce fear but behavior disorganization and hence the results were explainable by regression rather than fear, supporting the psychoanalytic concept of ulcer formation.—J. W. Bowles, Jr.

3321. Weisman, Avery, & Finesinger, Jacob E. Psychotherapeutic considerations of peptic ulcer. J. nerv. ment. Dis., 1949, 110, 440-443.—Abstract and discussion.

3322. Weiss, E. (Temple U., Philadelphia, Pa.), & Saul, L. J. Psychosomatic medicine. In Spiegel, E. A., Progress in neurology and psychiatry, 1947, (see 24: 3261), 403-415.—The 32 papers reviewed under this rubric deal with Rorschach and other personality tests, EEG, nutritional biochemical studies, conditioning, psychosexual behavior, head

injuries and headache, stuttering, enuresis, and the biology of schizophrenia.—C. E. Henry.

(See also abstracts 3108, 3214)

CLINICAL NEUROLOGY

3323. Allen, Robert M. (U. Miami, Fla.) A comparison of the test performances of the braininjured and the brain-diseased. Amer. J. Psychiat., 1949, 106, 195-198.—Two groups of patients in a veterans hospital, one group classified as brain diseased, and the other as brain injured, were studied and compared for test performance on the Wechsler-Bellevue Scale (Form I). The findings indicated that there is little statistically to differentiate between the groups as far as subtest functioning on this intelligence scale is concerned. Brain injured patients, on the average, showed more marked discrepancies between the verbal and performance subtests. The author holds that "the statistical findings do not fully justify the quantitative interpretation that such rigid constructs as mathematical limits would imply." He stresses the importance of the clinical picture, which only close contact with the patient can give, to understand the personality relationships involved.—R. D. Weitz.

3324. Alpers, Bernard J. Cerebral birth injuries. In Brock, S., Injuries of the brain and spinal cord and their coverings, (see 24: 3329), 229-256.—This chapter deals primarily with the acute effects of direct and indirect birth injury to brain and its coverings. While the overall incidence of such trauma is only 1-2% there is a high proportion of such injury among babies dying during the first week. In utero damage may result from both infections and toxic processes. Prematurity and asphyxia contribute heavily to birth injuries, as does the actual trauma, usually fracture, of the skull. Various types of hemorrhage are discussed in detail. Although data on late sequelae are confused and unreliable it appears that paralyses, porencephaly, epilepsy, and mental deficiency may all develop. 53-item bibliography.—C. E. Henry.

3325. Bender, M. B. (New York U.) Neurology of the optic and oculomotor systems. In Spiegel, E. A., Progress in neurology and psychiatry, 1947, (see 24: 3261), 131-144.—This review for 1946 describes several new syndromes as well as some new cases of battle injuries of the brain.—C. E. Henry.

3326. Blomquist, Ivan. Investigations into the color-form reaction of epileptics. Acta psychiat., Kbh., 1949, 24, 149-166.—The tendency to observe color rather than form and vice versa was investigated with Lindberg's Ring Test in 213 Swedish institutionalized epileptics, ages 6 to 55 years. The marked tendency toward color reaction is a pathoplastic phenomenon having its root in the general fall in level of the disease itself as commonly observed in cases of organic mental disorders. Incidentally, the mean IQ was 67 and the body type predominantly leptosomic. 32 references.—D. Prager.

3327. Brenner, C. (Montefiore Hosp., New York), & Merritt, H. H. Epilepsy. In Spiegel, E. A., Progress in neurology and psychiatry, 1947, (see 24: 3261), 155-163.—The 82 papers cited for 1946 in this review deal principally with the effects of anti-convulsants.—C. E. Henry.

3328. Bridge, Edward M. Epilepsy and convulsive disorders in children. New York, McGraw-Hill, 1949. xiv, 670 p. \$8.50.—A comprehensive textbook on the convulsive diseases of children, placing particular stress on "the underlying forces that give rise to the symptoms." The first section of the book deals with such etiological factors as heredity, brain injury and the part that environment and personality may play in epilepsy. The second part deals with the onset of epilepsy, major and minor seizures, the management and treatment of this disease. The third and final section is concerned primarily with diagnostic procedures. Material on evaluation, care, and follow-up of the patient is given in numerous appendices. Extensive bibliography.—M. A. Seidenfeld.

3329. Brock, Samuel. (Ed.) (New York U.) Injuries of the brain and spinal corá and their coverings. (3rd ed.) Baltimore: Williams & Wilkins, 1949. xi, 783 p. \$10.00.—While 9 of the 26 chapters contributed by 28 specialists are virtual reprints of earlier editions (see 14: 5962) there is still a considerable body of new material in this edition. Two new chapters deal with vertebral column and spinal cord injuries, and there are also new chapters on post-traumatic neuroses and the effect of electric shock (not therapeutic) on the nervous system. The data in Hoefer's chapter on the EEG and head injury (see 24: 3335), are not available elsewhere. Chapter references.—C. E. Henry.

3330. Davidoff, L. M. (Columbia U., New York), & Oscherwitz, D. Brain tumors. In Spiegel, E. A., Progress in neurology and psychiatry, 1947, (see 24: 3261), 327-341.—This review of 60 papers is essentially medical, dealing with diagnosis, treatment and pathological studies.—C. E. Henry.

3331. Dussik, K. Th., & Urban, H. Zur Nachbehandlung der zentralen und peripheren Nervenverletzungen des Krieges. (Convalescent therapy of central and peripheral nerve injuries of war.) In Forschungen und Forscher des Tiroler Arzteschule (1945-1947). Innsbruck: Universität, 1947, 19-37. The clinical problems of nerve and brain injuries can only be solved by a joint consideration of their social, diagnostic-therapeutic, and scientific-theoretical aspects. Diagnosis and treatment, especially of war injuries, are discussed. Both individual and group therapy are considered. The authors emphasize that with prompt neuro-surgical intervention and correct neuropsychiatric treatment an enormous restitution of functions may be achieved even in cases of extensive brain damage. Such restitution was previously believed almost impossible and is irreconcilable with a static mosaic conception of brain functions .- H. H. Strupp.

3332. Elejalde, Paulo, & Lopes, Ernani. Tipo juvenil da doenca de Alzheimer. Estudo anatomoclinico. (Juvenile type of Alzheimer's disease. Anatomical-clinical study.) Rev. Centro psiquiát. nac., Rio de J., 1946, 1, 45-66.—The authors consider that a juvenile type of Alzheimer's disease exists. One such case is presented in great detail. First symptoms (epileptic crisis, character difficulties with puerility) at 19, no remission, death at 55. Accepting the distinction of W. H. McMenemey between exogenous and endogenous forms of Alzheimer's disease, the case presented is classified as endogenous; moreover, its duration is the longest recorded until now for such cases. 80-item bibliography.—A. Manoil.

3333. Elvidge, A. R. The post-traumatic convulsive and allied states. In Brock, S., Injuries of the brain and spinal cord and their coverings, (see 24: 3329), 257-297.—This chapter gives a review of the literature plus a detailed analysis of 362 cases of acute head injury. Severity of injury is related to incidence of seizures. There is a discussion of clinical and laboratory examination techniques and an evaluation of types of treatment. 68 references.

-C. E. Henry.

3334. Freeman, W., & Watts, J. W. (George Washington U., Washington, D. C.) Psychosurgery. In Spiegel, E. A., Progress in neurology and psychiatry, 1947, (see 24: 3261), 461-472.—The brisk polemics in this new area of endeavor are reminiscent of the antivaccinationists and antivivisectionists. However, truth will out, and increasing numbers of long term follow-up studies are revealing scientific bases for selection of candidates. The indications are that cases of intractable pain respond well, as do post-encephalitic behavior disturbances and certain types of psychoses. The improvement in precision technique is reflected in post-mortem anatomic studies. While IQ intelligence is not affected certain self-evaluative capacities are blunted, which may in turn be used to therapeutic advantage.—C. E. Henry.

3335. Hoefer, Paul F. A. The electroencephalogram in cases of head injury. In Brock, S., Injuries of the brain and spinal cord and their coverings, (see 24: 3329), 737-772.—Following a brief comment on technique and interpretation the results of a study of 244 patients with head injury are reported in detail. Of 97 cases with normal EEG's only 16.5% still showed clinical signs. Of the remaining 147 patients 72 showed very marked diffuse abnormalities, 43 showed diffuse but less severe abnormalities and 32 showed focal disorders. There are numerous case histories with examples of the records obtained. The pertinent literature is reviewed, disclosing an incidence of 60-70% EEG abnormality. Even severe changes, however, usually show considerable improvement. 26 references.—C. E. Henry.

3336. Hyslop, George H. The effects of electric shock on the nervous system. In Brock, S., Injuries of the brain and spinal cord and their coverings, (see 24: 3329), 660-674.—This chapter is largely concerned with the effects of accidental electric shock

on the nervous system and the heart. Physical principles involved are reviewed along with the probable physiological effects. There are statistics on the incidence of such accidents, comments on the clinical effect of nonfatal shock and brief suggestions regarding treatment. 22 references.—C. E. Henry.

3337. Levin, Sidney; Greenblatt, Milton; Healey, Marie M., & Solomon, Harry C. (Boston (Mass.) Psychopathic Hosp.) Electroencephalographic effects of bilateral prefrontal lobotomy; comparison of cases with and without postlobotomy seizures. Amer. J. Psychiat., 1949, 106, 174–184.—The electroencephalographic effects of bilateral prefrontal lobotomy upon a selected group of 25 chronic psychiatric cases who manifested seizures after lobotomy and 46 chronic psychiatric cases who were seizure-free after lobotomy are reported by describing prelobotomy EEG's, postlobotomy EEG's and the relation of clinical status after lobotomy to postlobotomy seizures and EEG findings. 22-item bibliography.—D. E. Walton.

3338. Lichtenstein, A., & Melin, K.-A. The electroencephelogram in cases of tuberculous meningitis. Acta paediatr., Stockk., 1949, Suppl. 75, 75-82.—"Electroencephelographic examinations of 7 children with streptomycin-treated tuberculous meningitis showed that clinical deterioration, which set in in 3 cases, was accompanied by EEG changes in the form of large 4-5/sec. waves. In 1 case EEG changes were the first indication of deterioration. In 4 cases which were restored to complete or almost complete health the EEG changes noted earlier in the disease disappeared. Thus repeated EEG recordings may be of prognostic value and even indicate a need for intensified treatment.—D. Prager.

3339. Liss, Edward. Art work of an epileptic child. Psychosom. Med., 1949, 11, 315-316.—

Abstract.

3340. Melin, Karl-Axel. Electroencephalography following head injuries in children. Acta paediatr., Stockh., 1949, Suppl. 75, 152-174.—Unlike older children and adults, pronounced and persistent EEG changes were not found associated with skull fractures of younger children. In all 134 cases EEG findings were more pronounced than the clinical condition indicated and more persistent than clinically observable symptoms. In 18 cases there were localized findings. EEG changes included general dysrhythmia, hypersynchronia, and isolated depressed activity. The EEG is an effective complement to the clinical examination in cases of acute cerebral injury in children. 16 references.—D. Prager.

3341. Nielsen, J. M., & Sedgwick, R. P. (727 W. 7th St., Los Angeles 14, Cal.) Instincts and emotions in an anencephalic monster. J. nerv. ment. Dis., 1949, 110, 387-394.—Crude instincts and emotions were observed in an anencephalic monster without even thalami. The startle reflex and the sucking and grasping reflexes that were elicited are also believed to be patterned in the brain stem and spinal cord. The cerebral cortex is believed to be

"a receptor and motor mechanism by which instincts and emotions are expanded but it is not essential to infantile instincts and emotions."— N. H. Pronko.

3342. Obraztsova, G. A. Ulitko-zrachkovyl refleks u hudel s normal'nym slukhom i u kontuzhennykh. (The cochlear-pupillary reflex in persons with normal hearing and in the shell-shocked.)
Trud. fisiol. Lab. Pavlova, 1947, 14, 108-114.—In adults with normal hearing the reflex pupillary dilation to sound appears with intensities 20-25 decibels higher than the average auditory threshold for frequencies of 512 and 1024. For higher and lower frequencies the reflex threshold is higher (40 decibels higher for frequency of 4096). In the shellshocked, restoration of hearing begins first on that side where the cochlear-pupillary reflex is most clearly expressed. Speed and degree of restoration of hearing is higher for side evincing the reflex more strongly.—I. D. London.

3343. Peers, James H., & Lillie, R. D. (Nat'l Inst. Hith., Bethesda, Md.) The topographic pathology of the cerebral lesions of acute poliomyelitis in man. Amer. J. Path., 1949, 25, 725-740.

—The results reported are based on 42 brain specimens with clinical histories available for thirty-five patients. Two-thirds of the patients had poliomyelitis of the pure bulbar type with no evidence of paralysis at the time of death. The other one-third were considered as mixed bulbar and spinal types: (1) infiltration of small lymphoid cells, (2) a ground substance; and (3) necrosis of nerve cells. Lesions and extent of damage in important motor and sensory nuclei are described in detail.-R. S.

Waldrop.

3344. Pool, J. Lawrence. (Neurological Instit., New York.) Topectomy: the treatment of mental illness by frontal gyrectomy or bilateral subtotal ablation of frontal cortex. Lancet, 1949, 257, 776— 781.—The operation of topectomy or gyrectomy (restricted ablation or excision, usually in the frontal lobes) is described. Its disadvantages are longer operative time and a higher incidence of postopera-tive convulsions (14% as opposed to 10-12%) than with prefrontal lobotomy. The advantages of topectomy are a less radical invasion, lower mortality-rate (0 in 125 cases), better localization of the lesion and estimate of its extent (both site and quantity being important factors determining success), less risk of serious postoperative personality changes (of 52 patients, observed for a year or more, about 44% have maintained significant improvement), and a better opportunity for studying the functions of the frontal lobes.—A. C. Hoffman.

3345. Pool, J. Lawrence; Heath, Robert G., & Weber, John J. Topectomy: surgical technique, psychiatric indications and postoperative management. J. nerv. ment. Dis., 1949, 110, 464-477.— "(1) The surgical technique of topectomy is described (Part I). (2) Various factors which must be taken into consideration in selecting patients for frontal lobe surgery are discussed (Part II). (3) Some general ideas of psychiatric management following operation are presented (Part II.)"-N. H. Pronko.

3346. Riese, W., & Fultz, G. S. (Med. Coll. Virginia, Richmond.) Electric shock treatment succeeded by complete flaccid paralysis, hallucinations, and sudden death. Case report with anatomical findings in the central nervous system. Amer. J. Psychiat., 1949, 106, 206-211.—The case of a 44-year old woman who developed a flaccid paralysis of all four extremities with areaflexia and auditory hallucinations respectively after her second and fourth electroshock treatments and soon thereafter died, is presented. 18 references.-D. E. Walton,

3347. Stern, Karl, & Elliott, K. A. C. (McGill U., Montreal, Can.) Experimental observations on the so-called senile changes of intracellular neurofibrils. Amer. J. Psychiat., 1949, 106, 190-194.—In the present experiments, rabbits' brains were dehydrated in vivo by intravenous administration of 25% glucosesolution. The subsequent changes correspond to the initial stages of Alzheimer's cell changes in man as encountered in senile and pre-senile conditions and are discussed in the light of the literature on this

subject. 30 references.—D. E. Walton.
3348. Thygesen, Paul, & Christensen, Erna. Curare therapy in spastic conditions. Acta psychiat. Kbh., 1949, 24, 251-280.-Reduction of spasms and mitigation of spastic pains are obtained by intramuscular injection of about 1.5 c.c. of intocostrin and 0.5-0.8 c.c. of tubarine or tubocuran into 14 spastic patients. The spasm reduction lasts a few days. Quinine methochloride also reduces spasm and can be given orally, but only a very slight amount of this substance was available. Results warrant further therapeutic experiments with these remedies in cases of rigidity and spasticity of various

etiology. 18 references.—D. Prager.
3349. Walker, A. E. (U. Chicago, Ill.), & Hopple,
T. L. Surgical treatment of motor and sensory disturbances. In Spiegel, E. A., Progress in neurology and psychiatry, 1947, (see 24: 3261), 342-347.— From this review of 15 papers it is concluded that the important problems raised by war injuries have received no notable new solutions.—C. E. Henry.

3350. Watson, Neal. (International Psychological Service Center, Washington, D. C.) A qualitative check list for the clinical use of the Leiter adaptation of Arthur's Stencil Design Test in the evaluation of brain injury. Psychol. Serv. Center J., 1949, 1, 69-70. The use of a qualitative check list when using the Leiter Adaptation of Arthur's Stencil Design Test with cases of organic impairment is discussed. A facsimile of page one of the check list is reproduced. -H. Feifel.

3351. Watson, Neal. (International Psychological Service Center, Washington, D. C.) A qualitative check list for the clinical use of Partington's Pathways Test in the evaluation of brain injury. Psychol. Serv. Center J., 1949, 1, 49-51.-The author discusses a qualitative check list to be used with the Partington's Pathways Test in recording the responses of brain injury cases.-H. Feifel.

3352. Wycis, H. T. (Temple U., Philadelphia, Pa.) Cerebral trauma. In Spiegel, E. A., Progress in neurology and psychiatry, 1947, (see 24: 3261), 308-317.—The 41 papers covered in this review deal largely with military cases under the headings of penetrating craniocerebral wounds, post-traumatic convulsions, subdural hemotoma, histopathology, cranioplasty, cerebral concussion and postconcussion syndrome.—C. E. Henry.

3353. Yaskin, J. C. (U. Pennsylvania, Philadelphia), & Rupp, C. Neurology. In Spiegel, E. A., Progress in neurology and psychiatry, 1947, (see 24: 3261), 89-118.—This review covers 71 papers appearing in 1946 dealing with meningitis, poliomyelitis, encephalitis, tetanus, neuritis, vascular diseases and degenerative diseases.—C. E. Henry.

(See also abstracts 2980, 3269)

PHYSICALLY HANDICAPPED

3354. Fitzgerald, Edith. (School for the Deaf, Austin, Texas.) Straight language for the deaf, a system of instruction for deaf children. (4th ed.) Washington, D. C.: Volta Bureau, 1949, 97 p.— This is the fourth edition of the author's volume on her method of teaching language to deaf children. The system includes the use of a "key" which when used properly gives the deaf child a visual way of learning language. "It provides for needs as they arise and supplies those needs in a natural manner, yet in a way that involves visualization and understanding on the part of the child." Complete directions are given for developing vocabulary and connected language.—H. R. Myklebust.

3355. Hayes, Samuel P. (Perkins Institution for the Blind, Watertown, Mass.) What mental tests should we use? Outlook for the Blind, 1949, 43, 271-279.—An initial article of a series in which tests given favorable criticism in Buros' Mental Measurements Yearbook are considered in terms of their adaptability to use with the blind. Vocational interest inventories for adults and vocational and education interest inventories for school children are discussed. The Kuder Vocational Preference Record is especially suitable for use with adults. The Ohio Interest Inventory for intermediate grades is well adapted for educational guidance of blind children.—K. E. Maxfield.

3356. Hewitt, Mark. The unemployed disabled man. Lances, 1949, 257, 523-526.—The medical and psychosocial characteristics of a group of 50 unemployed disabled men are described: nature of the disability, previous work record, extent and effects of subsidies or compensation, education, legal record, marital status, and interests.—A. C. Hoffman.

3357. Hood, H. Blair. A preliminary survey of some mental abilities of deaf children. Brit. J. educ. Psychol., 1949, 19, 210-219.—401 deaf children, ages 8-12, attain a mean IQ of 99.3 on the Anderson Performance Scale, with a scatter greater than that of hearing children. The distribution deviates substantially from the normal, with a cluster of low

IQs. The mean IQ of adventitiously deaf children is significantly greater than that of the congenitally deaf, and only 19% of the former fall below 85 IQ as compared with 34% of the latter. Reading and vocabulary scores vary directly with the age of onset and inversely with the degree of deafness. The intelligence of children born deaf with 90-100% hearing loss increases with longer attendance at school. Deaf boys are superior to deaf girls in intelligence, but inferior in reading. Those deafened by meningitis show a higher mean IQ than those deafened from other causes.—R. C. Strassburger.

3358. Knapp, Peter Hobart. Emotional aspects of hearing loss. J. nerv. ment. Dis., 1949, 110, 444-448.—Abstract and discussion.

3359. Lancaster, Walter B. Apropos of improving vision by eye exercises. Sight-sav. Rev., 1949, 19, 229-233.—A discussion of the dangers inherent in the Bates method of improving vision. Although meant primarily for workers with the partially seeing, it affords clinical psychologists better understanding of an unscientific treatment of eye disability which occasionally comes to their attention.—K. E. Maxfield.

3360. Martin, Mary. The hard-of-hearing child at home and in school. Understanding the Child, 1949, 18, 111-113.—The problem of the hard of hearing has three main parts: the discovery of it, the acceptance of it, and the treatment of it. Hearing loss can be discovered in young infants. The child should be trained as any other child and in addition be given the training he requires because of his handicap.—C. Schmehl.

(See also abstract 3242)

EDUCATIONAL PSYCHOLOGY

3361. American Council on Education. Intergroup Education in Cooperating Schools. Reading ladders for human relations. (Rev. ed.) Washing-Reading ton: American Council on Education, 1949. x, 115 p. \$1.25.—The general plan is to furnish materials and techniques for improving human relations and for fostering intergroup understanding in the school and the community. Sections or "ladders" are devoted to ways of using books, patterns of family life, community contrasts, economic differences, differences between generations, adjustment to new places and situations, how it feels to grow up, belonging to groups, and experiences of acceptance and rejection. Each "ladder" includes classified lists of books, some of which are annotated. Also there is a summary of ideas around which the books are gathered with suggestions on use of the books.-M. A. Tinker.

3362. Barmack, Joseph E., [Ed.] (City College of New York.) Proceedings of the symposium on conference techniques. Tyndall Air Force Base, Fla.: Air Tactical School, 1949. 54 p.—Papers presented at a symposium on conference techniques held at City College of New York including contributions from the faculty and from the staff of the seminar division of the Air Tactical School are presented.

The major subjects of these papers are logic and scientific method, effective oral presentation, and methods of conducting discussion conferences. The following are the major papers included: Daniel J. Bronstein, "Some Illustrations of Logic and Scientific Method;" R. C. Pennington, "Problems of Teaching Public Speaking and Effective Articulation;" Arthur Mallon, "The Conference Method of Instruction at the Command and General Staff School;" Robert Greenleaf, "Some Conference Principles;" W. R. Gondin, "The Dynamics of Group Discussion."—C. M. Louttit.

3363. Carrothers, George E. (U. Michigan, Ann Arbor.) It takes time for children to learn. Sch. & Soc., 1948, 68, 169-171.—The chief agent of devastation in modern education is failure on the part of well meaning parents and social and civic organizations to recognize that time is necessary for adequate learning. A rigid schedule or a worship of time itself is not the solution. 13 ways in which learning time is dissipated are enumerated. The moral issue of cheating the unsuspecting students is raised and discussed. Time studies are of the essence in productivity in industry, but "in education, competition is keen only in the field of sports." The notion of present day students that education is of so little importance "that it can be obtained on the run" is perhaps the most insidious and harmful threat of all.—R. S. Waldrop.

3364. Caswell, H. L. (Columbia U., New York.) Influence of John Dewey on the curriculum of American schools. Teach. Coll. Rec., 1949, 51, 144-146.—John Dewey is the formulator and interpreter of the meanings of the American democratic ideal. In a philosophy giving expression to the experience of the American people he provided a guide for developing a school curriculum possessing the qualities needed to further democratic ideals. He asked for living motivation in subject matter, showing the experience of the child as the central concern. Regard for the all-round development of the child has replaced concentration on intellectual achievement. Comparison of a modern educational program with one of the preceding century indicates the strength of his influence upon the curriculum.—G. E. Bird.

3365. Childs, John L. (Columbia U., New York.) Cultural factors in Dewey's philosophy of education. Teach. Coll. Rec., 1949, 51, 130-132.—Dewey believes that if our democratic civilization is to survive the school must be one of our primary social agencies. His philosophy of education can be best understood through the cultural factors involved. These include his theory of organic evolution, his scientific methods in experimental research, the concept of the worth and dignity of each human personality, and democracy both as a form of government and a mode of living. His central idea is an activity school that gives each child a chance to grow through first-hand experience in the practices of the democratic way of life.—G. E. Bird.

3366. Forest, Ilse. (Brooklyn Coll., N. Y.) Early years at school; a textbook for students of

early childhood education. New York: McGraw-Hill, 1949. xiii, 381 p. \$3.75.—This college text treats the educational levels of nursery school, kindergarten, and the lower grades in terms of the child and the curriculum. Part I surveys early childhood education in its historical development, and assesses the role of the kindergarten in the emergence of modern theory and practice in child-centered education at this level. The developmental sequences from 2 to 8 are described. Part II discusses this curriculum in detail. Part III considers the guidance function of the school during the early years.—R. C. Strassburger.

3367. Gommès, Antoinette. L'École Internationale de Genève. (The International School of Geneva.) Enfance, 1948, 1, 268-274.—How to give a common culture to children whose language, cultural heritage, and interests are so different, is shown in the efforts of the International School of Geneva created for children of the members of the Society of Nations and of the International Bureau of Work. More recently a second establishment has been opened in New York for the children of the United Nations. The program of work on the primary, intermediate, and secondary levels is sketched and attention is drawn to the role of social life in the school and of committee organization.—
F. C. Sumner.

3368. Henry, Nelson B. [Ed.] The Forty-Eighth Yearbook of the National Society for the Study of Education. Part I. Audio-visual materials of instruction. Chicago: The University of Chicago Press, 1949. x, 320 p. \$2.75.—Fourteen contributors discuss educational theories and principles as applied to the production, administration and utilization of audio-visual instructional materials. The introductory chapter "Communication in the Modern World" is followed by chapters dealing with the practical problems confronting teachers in the use of audio-visual teaching aids, with preservice and inservice teacher education, with the development of programs of audio-visual education in city school systems, in rural schools and at the state level, and with principles of administering such programs. The 62 most frequently asked questions in this field are answered and all contributions informally summarized. One chapter reports the research on audiovisual materials and gives 163 references.—B. Lowenfeld.

3369. Laputa, G. L. Concerning examinations and grades. Sch. & Soc., 1948, 68, 89-91.—Grades and examinations erroneously and detrimentally are the focal point of the attention of the modern college student. The reliance on required courses irrespective of the ability and aim of the student as well as the emphasis on grades and examinations are thwarting the chief end of education which for the author is the development of independent judgment, enjoyment and understanding of course content, and personal development along lines of natural ability.—R. S. Waldrop.

3370. Park, Clyde W. (U. Cincinnati, O.) Personality and educational leadership. Sch. & Soc., 1948, 68, 129-131.—The occasion of these anecdotal and philosophical remarks on the personal qualities of college presidents was the acceptance of General Eisenhower of the presidency of Columbia University. Assuming a good educational background, a president's success depends probably on certain qualities of personality and leadership ability. With regard to Eisenhower's selection the author concludes that "Education can use such elements of leadership as vision to discern objectives, skill in organizing men and resources, and adaptability in meeting unforeseen conditions."—R. S. Waldrop.

3371. Phearman, Leo T. (Iowa State Teachers Coll., Cedar Falls.) Comparisons of high-school graduates who go to college with those who do not. J. educ. Psychol., 1949, 40, 405-414.—School records and the returns on questionnaires sent to graduates of 94 high schools provided the data for this study. The frequencies of various reasons given for not going to college were similar to those found by Bell in 1938. The economic factor was, in both studies, important. It was found that those who entered college were academically superior, as a group, to those who did not. College attendance was found to be related to size of family, father's occupation, and parent's education. Of those enrolled in college 67.4% of the boys and 33.1% of the girls had all expenses paid by parents. A comparison of their median percentile ranks showed that the boys in college were academically somewhat superior to the girls.—E. B. Mallory.

3372. Wilcox, George M. (Youngstown Ohio Coll.) College credit to veterans for education experiences in the Armed Services. Sch. & Soc., 1948, 68, 126-127.—In January, 1948, a question-naire concerning the uses made of the ACE Guide to the Evaluation of Educational Experiences in the Armed Services was distributed to the academic deans from 85 colleges representing all sections of the country. Eleven questions were used. Results indicated that GED-College Level were accepted for credit least frequently. Only half of those replying were granted credit.—R. S. Waldrop.

3373. Zeligs, Rose. (Avondale Public Sch., Cincinnati, O.) Growth in more favorable attitudes toward the Negro. Elem. Sch. J., 1949, 50, 151-153.

The visit of a young white woman representing N.A.A.C.P. to a 6th grade class started discussions on racial relations, leading to visits by student committees to various offices. A better understanding of democracy and less prejudice against the Negro resulted.—G. H. Johnson.

(See also abstracts 2949, 2961)

SCHOOL LEARNING

3374. Atkinson, Gretchen. (Marquette School, South Bend, Ind.) The sociogram as an instrument in social-studies teaching and evaluation. Elem. Sch. J., 1949, 50, 74-85.—34 4th and 5th grade

pupils were given three sociometric tests during a 19 month period, the results being used for setting up group activities. A tendency to overchoose children from upper socioeconomic levels, and to overchoose old timers in comparison with newcomers, was noted. There seemed to be no definite effect of religion on choices. There were fewer unchosen members of the class as time progressed, this improvement in intergroup relations being attributed to the group work carried on by the class.—G. H. Johnson.

3375. Axline, Virginia Mae. (Teachers Coll., Columbia U., New York.) Play therapy . . . a way of understanding and helping "reading problems." Childh. Educ., 1949, 26, 156-161.—Description of the responses of three reading-problem children to play materials emphasizes the importance of emotionalized attitudes in contributing to difficulties in learning to read, and use of reading as a means of escape.

-G. H. Johnson.

3376. Billig, Albert L. (Allentown High Sch., Allentown, Pa.) A study of the learning process in the classroom. Proc. Pa. Acad. Sci., 1949, 23, 222-230.—Working with 180 10th grade business mathematics pupils, the experimenter required the pupils to work independently on their assignments to gain confidence, using drill only after the need was established through pointing out errors in work. Papers were graded by the students in rotation, the student grader presenting an evaluation of the work to the class each day. Progress was shown in neatness and accuracy of the work done over the school year.—G. H. Johnson.

3377. Boney, C. DeWitt. (Nassau Sch., East Orange, N. J.) Shall beginning reading be delayed? Childh. Educ., 1949, 26, 168-172.—Emphasis on beginning reading in the first grade is due to parental pressure, use of standardized tests by administrators as an easy means of supervision, and pressures from authors of reading materials. Of 74 schools surveyed as to reading instruction, 6 to 10 are beginning to delay reading for some children, these latter schools reporting no substantial changes in intermediate grade reading scores, and improvements in other areas of child development. A beginning reading program spread over a 3 year period should be widely adopted.—G. H. Johnson.

3378. Borg, Walter R. (U. Texas, Austin.) A study of the relationship between general intelligence and success in an art college. J. educ. Psychol., 1949, 40, 434-440.—A group of 427 students at the California College of Arts and Crafts who were given the A.C.E. Psychological Examinations made scores closely approximating in mean and distribution, those of the published norms. L, Q, gross, and subtest scores all showed low positive correlations with grade-point averages. The art teaching group was slightly superior to the fine arts group and the commercial art group. The men's average was higher than the women's on Q scores.—E. B. Mallory.

3379. Brickman, W. W. (New York U.) Sex education. Sch. & Soc., 1948, 68, 138-143.—This

critical and selective review of the subject covers 16 major publications of 1946-1948. Additional references are cited. Topics covered by the titles include guides for instruction, information on VD campaigns, sex instruction written expressly for the younger generation," literature for teen-agers and comments on the Kinsey report. Little is found in this area which can be considered as research.—R. S. Waldrop.

3380. Cornelius, Ruth. (Hempstead Sch., St. Louis, Mo.) Reading with six-year-olds. Childh. Educ., 1949, 26, 162-163.—A group of 35 first-graders were divided into 7 groups on the basis of sociometric choices, each child being leader of his group at least once a week, and receiving individual help from the teacher the preceding day. Reading became more enjoyable, it was easier to take and give help, reading skill improved, and social adjustment was accelerated. Having third graders visit the first grade and read stories, and play reading games, also seemed to help reading.—G. H. Johnson.

3381. Dearborn, W. F., Johnston, P. W., & Carmichael, L. (Tufts Coll., Medford, Mass.) Oral stress and meaning in printed material. Science, 1949, 110, 404,-"Readers who stress words which the author indicates should be stressed obtain significantly superior scores when given a written comprehension test on the same reading material. Correlation coefficients ranging from 0.45 to 0.65 have been consistently found in several hundred high school and college subjects so far studied." Implications for increased emphasis on oral (as against silent) reading, and the more meaningful presentation of printed material typographically by consistently indicating words to be stressed, are briefly discussed.—B. R. Fisher.

3382. Fuller, Kenneth Gary. An experimental study of two methods of long division. Teach. Coll. Contr. Educ., 1949, No. 951, 76 p.—This study investigates the usefulness of teaching a method of long division which involves construction and use of a table of multiples of the divisor. The method was tested on 3 matched classes totalling 86 fifth grade pupils, one class serving as a control. Concerning accuracy of performance, differences between control and experimental groups were not significant when the problems involved 2-figure divisors and 4-figure quotients. However, with 3-figure divisors and 4 or 5-figure quotients the differences were both in favor of the experimental groups, one difference being significant at the .05 level. The experimental groups needed more time to complete the tests than did the control group though the time excesses declined from 34 and 49% to 17 and 31% in going from the shorter to the longer problems. The author believes advantages of the experimental method increase with increasing difficulty of the problems.-J. E. Horrocks.

3383. Gans, Roma. (Columbia U., New York.) How do we know when children are ready to read? Childh. Educ., 1949, 26, 152-155.—Preschool experiences of children influence readiness to read, an interest in the task being thus produced in some

children, while others learn to dislike it and become emotionally concerned. To deal with individual differences in readiness, experimentation with methods and materials is needed. Cues as to effective methods should come from the children, with techniques adapted to the interests, methods of learning, and experiences of the children.-G. H. Johnson.

3384. Harris, Melva. (Public Sch., Muncie, Ind.)
Beginning reading without readers. Childh. Educ., 1949, 26, 164-167.-15 first-graders, who were ready to read as shown by mental and readiness tests, received a year of reading instruction using no textbooks. Story books were used, the teacher first reading to the children and then having them read to the group. The group read 47 books during the year, with progress in word recognition, vocabulary development, and mastery of new words checked by teacher-made tests. At the close of the year, the median grade score on the Gates Primary Reading Test Form 3 was 2.75.-G. H. Johnson.

3385. Keliher, Alice V. (New York U.) When will we do as well as we know? Childh. Educ., 1949, 26, 148-151.—Reading anxiety is detrimental to reading progress, acting as a disguise for basic insecurities. Parents, teachers, and administrators all show anxiety with reference to the reading of children. Remedial reading must get at basic in-securities and maladjustments to clear the way for reading progress. The reading program should begin in the home and go all through life.-G. H. Johnson.

3386. Krathwohl, William C. (Illinois Institute of Technology, Chicago.) An index of industriousness for English. J. educ. Psychol., 1949, 40, 469-481.— An index of industriousness for English was derived from the amount by which an individual's scores differed on aptitude (vocabulary) and achievement (mechanics of expression) measures. The "industrious" quarter of a freshman class were still doing better work in English than others of equal aptitude one year and eight months later. Low ability in English plus indolent work habits made it impossible for a student to remain in college through two years. No student with very low ability, however industrious, was able to get a grade above average in English.—E. B. Mallory.

3387. Lampkin, Richard H. Variability in recognizing scientific inquiry; an analysis of high school science textbooks. Teach. Coll. Contr. Educ., 1949, No. 955, ix, 79 p.-12 high school textbooks in general science, biology, physics and chemistry were analyzed by 12 judges, 6 with competence in the field of science teaching and 6 in philosophy. Each judge was given a composite textbook, a coding guide, and detailed written instructions. Major questions raised were: What is the scientific method of inquiry? Have the authors attempted directly to teach it? What means were used in presentation, and how much space was given? Statistical analysis of data included analysis of variance and chi-square tests. High variability among judges was found. Mean space devoted to scientific inquiry in books was

approximately 10%.-J. E. Horrocks.

3388. Mauck, Inez L. (Indiana State Teachers Coll., Terre Haute.), & Swenson, Esther J. A study of children's recreational reading. Elem. Sch. J., 1949, 50, 144-150.-364 pupils in grades 4-8 were given access to 171 books for free reading; records were kept of the books and number of pages read by each pupil. The next year, all pupils in grades 5-8 ranked the ways they used their spare time, and 80 children, 10 who read much and 10 who read little in each grade, were interviewed concerning reasons for reading much or little. Considerable use was made of the books, children in grades 4-6 choosing books of approximately the same grade placement, with more difficult books being chosen in grades 7-8. Fiction had the highest appeal at all age levels. Reading ranked below sports, radio-listening, games and movies in popularity. Those who read most remembered more of what they read, but could identify only 2 out of every 5 books read after one year.—G. H. Johnson.

3389. Nichols, Augusta M. (Public Schs, Manchester, N. H.) The analysis and correction of spelling difficulties. Elem. Sch. J., 1949, 50, 154-161.—Construction of a group test to measure spelling difficulties, consisting of subtests on spelling achievement, proofreading, word meaning, handwriting, visual discrimination, and auditory discrimination is described. 423 3rd grade children were tested with Form A, showing 173 to score below the city mean in achievement. This latter group received remedial instruction for 4 months, and then were retested with Form B. There was a substantial reduction in number of subtests failed and an increase in the number reaching the city mean. The test was regarded as effective in analyzing spelling errors and in determining the effectiveness of remedial instruction.—G. H. Johnson.

3390. Owens, William A. (Winona (Minn.) State Teachers Coll.), & Owens, William A., Jr. Some factors in the academic superiority of veteran students. J. educ. Psychol., 1949, 40, 499-502.—The subjects, 194 male veterans enrolled in a state teachers college, had a mean age of 23 years, 3 months, a mean period of service just over 31 months, and an average ACE score exactly at the national norm. The multiple correlation technique showed that grade point average was correlated positively with age, and negatively with length of military service. The correlation of .47 between aptitude ACE scores and grade point averages was increased to .57 by including the contributions of age and length of service.—E. B. Mallory.

3391. Pierson, Rowland R. (Michigan State Coll., B. Lansing.) Age versus academic success in college students. Sch. & Soc., 1948, 68, 94-95.— This paper is a statistical summary of grade averages and "T" scores on ACE Psychological Examinations of 600 students, testing the hypothesis that age and maturity correlate positively with academic performance. Age at the time of entrance into college was the criterion for establishing 4 groups. These groups were divided according to sex, marital status,

and military status. Each divisional subgroup was compared on the basis of "T" score and grade point average. The summary "indicates that no one combination of the above factors is predominant in the students who made the highest grades."—R. S. Waldrop.

3392. Weber, Christian O. (Wells Coll., Aurora, N. Y.) Reading inadequacy as habit. J. educ. Psychol., 1949, 40, 427-433.—Slowness in reading may be caused by specific handicaps, but by the time a student reaches college it is possible that sheer habit is usually the essential factor. This is attested by the way that improvement in speed of reading may result from any one of a variety of methods. Any technique which forces the student to read rapidly, during training, will improve habits of attention, and break down previously fixed habits of

reading inadequacy.—E. B. Mallory.

3393. Wesman, Alexander G., & Seashore, Harold G. (Psychological Corporation, New York.) Frequency vs. complexity of words in verbal measurement. J. educ. Psychol., 1949, 40, 395-404.—Makers of vocabulary tests, when trying to determine the relative difficulties of vocabulary items, tend to confuse complexity with rarity. Tables of the percentages of words with certain frequency ratings indicate differences among a number of widely used tests. When the difficulty of an item depends on the precision of knowledge required to differentiate a synonym from other words akin in meaning, it tests an ability which differs from that required in recognizing the approximate synonyms of words infrequently used.—E. B. Mallory.

3394. Wiseman, Stephen. (Manchester U., Eng.) The marking of English composition in grammar school selection. Bril. J. educ. Psychol., 1949, 19, 200-209.—The use of the English essay among examinations for grammar school selection at 11+ raises the question of the reliability of its grading. Reliability in this case is essentially a measure of consistency of the markers, which may be either "inter-individual" or "intra-individual," according to the techniques employed. The method of general impression used by markers who are self-consistent is not less reliable than that of analytic marking, and probably more valid. Such a procedure employing independent judges of proved self-consistency, having an average inter-correlation of only .60 with one another, should yield an estimated probable correlation of averaged marks with "true" marks of .92. The results of using this method over a period of 10 years demonstrate its efficiency, and indicate total mark re-mark reliabilities of over .90.-R. C. Strassburger.

INTERESTS, ATTITUDES & HABITS

3395. Symonds, Percival M. (Columbia U., New York.) Classroom discipline. Teach. Coll. Rec., 1949, 51, 147-158.—Much of the undesirable behavior in the classroom is a neurotic unsatisfactory attempt to satisfy some underlying need. Neither punishment nor neglect gets at the root of

such trouble. It is more important to solve the basic conflict that causes the undesirable behavior than it is to attempt to suppress the behavior directly. If the school program engages the interest and enthusiasm of teachers and pupils, and if the teachers are encouraged to put their attention on the positive side of growth and development, the problems of discipline usually disappear. It is better to show a child that he is understood than it is to force him into submission to authority.—G. E. Bird.

(See also abstracts 3179, 3474)

SPECIAL EDUCATION

3396. Ballot, Marc. Essai d'organisation d'une école de perfectionnement. (An attempt to organize an improvement school.) Enfance, 1948, 1, 240-244.

—The evolution of the Ecole de Perfectionnement in Paris for children who can not properly receive instruction in normal classes by reason of physical handicap, pedagogical retardation or moral danger is here traced and its present activities are described.

—F. C. Sumner.

3397. Birmingham, Mary Maude. Organizing a special class for slow learning children. Understanding the Child, 1949, 18, 114-116.—A civic organization made a special class possible in a community in N. Carolina. The Jr. Chamber of Commerce also painted the room and laid linoleum on the floor. The decoration of the room was the responsibility of the class. It was only after the experiment had proved itself that the School Board assumed any financial responsibility.—C. Schmehl.

3398. McCain, Elizabeth. (Memphis (Tenn.) Publ. Schs.) Educational needs of exceptional children. Understanding the Child, 1949, 18, 107-110.—The basic need of any child is for understanding. Hence, a primary problem is classifying exceptional children. The teacher must recognize all the child's needs and deal with them understandingly. The physical equipment and facilities of the room are also discussed.—C. Schmehl.

3399. Nikol'skia, A. V. I z semi v dietskiū sad. (From the home to the nursery.) Doshkol'noe Vospitanie, 1948, 10(Oct.), 17-24.—The three year old, accustomed only to the home surroundings, has difficulty in adapting to the life in the nursery. Its manner of adaptation is characterized by the particular pattern of behavior acquired in the home. Adaptation is facilitated by: (1) careful grouping, regularity of routine, equal treatment of the children; (2) a close tie between the home and the school, familiarity with each child's environmental background, and alignment of the home and of the school training; (3) gratification of the individual child's physical and psychological needs; (4) a child-geared program and a relaxed atmosphere of gradual orientation. The child's experience in the nursery school will lead to positive emotional reactions if the program is interesting and meaningful and if the teacher is an understanding and friendly parent surrogate.—M. G. Nemets.

3400. Roche, Marius. La méthode Carrard et la formation professionnelle des adolescents. (The Carrard method and the vocational training of adolescents.) Enfance, 1948, 1, 245-247.—The principles of the Carrard method for training in an unfamiliar activity includes: (1) avoiding false movements in order to avoid the formation of a bad habit, and in breaking the action to be learned into elemental movements; (2) working from the concrete to the abstract; (3) introducing the new only when things previously learned have been thoroughly assimilated, accuracy being stressed more than rapidity; (4) in keeping interest aroused by varying the exercises and by avoiding fatigue; (5) in maintaining a permanent individual contact between the monitor and the pupil. Criticisms of the Carrard method are reviewed which largely oppose the breaking up of the work into elementary parts instead of beginning with the whole or psychological and logically related subwholes.—F. C. Sumner.

3401. Schonell, Fred J. (U. Birmingham, Eng.) The development of educational research in Great Britain. Brit. J. educ. Psychol., 1949, 19, 160-175.— The main research findings in respect to the education of deaf and part-deaf children, those with speech defects, and blind and partially sighted children are summarized in this article. Significant problems for further inquiry in these areas are proposed.—R. C. Strassburger.

3402. Stullken, Edward H. Education for emotional and economic security. Understanding the Child, 1949, 18, 99-106.—Because, today, education is considered to have a social purpose, the school is asked to function in areas not considered in the educational field 35 years ago. Special education is provided for those who are educationally retarded; and the child who is a truant or delinquent receives careful study. Teachers receive more adequate training in special education. Seven principles are enumerated which should be studied before a special education program for problem children is launched.—C. Schmehl.

(See also abstracts 3354, 3360)

EDUCATIONAL GUIDANCE

3403. Russell, R. D. (North Carolina Coll., Durham.) Guidance developments in Negro colleges. Occupations, 1949, 28, 25-27.—The results of a questionnaire survey of 20 state and municipally controlled, and 23 privately controlled, Negro colleges are presented. A trend toward the inclusion of organized guidance service in the over-all planning of Negro colleges is observed. The influence of veterans guidance centers is strongly felt.—G. S. Speer.

3404. Swan, Robert J. (U. Minnesota, Minneapolis.) The exit interview for veterans withdrawing from the University of Minnesota. Sch. & Soc., 1948, 68, 235-239.—Due to the nature of the problems of veterans the University established a system for withdrawals, in the case of students who

were veterans, with two major purposes in mind: (1) to collect "information concerning its services," and (2) "to aid in the adjustment of the individual." This paper describes five objectives of the interview, the nature of the interview situation, the recording of the interview, and a discussion of possible future use of the exit interview. A list of the reasons for withdrawal is given. In conclusion, "the exit interview . . . serves a therapeutic function through the release of emotional tension and helps reduce the 'failure effect' through personalizing the departure." -R. S. Waldrop.

3405. Wilson, Isabell. (City Park Collegiate, Saskatoon, Saskatchewan, Can.) The use of a sentence completion test in differentiating between well-adjusted and maladjusted secondary school pupils. J. consult. Psychol., 1949, 13, 400-402.-This study was an attempt to make a sentence completion test for secondary school pupils that would have value as a screening test to be administered early in a school year to select maladjusted pupils in need of personal help and potential well-adjusted leaders. Seven maladjusted and 15 well-adjusted children were tested. Formal analysis of the test did not discriminate between well-adjusted and maladjusted, but the test was of value in finding areas of maladjustment in individual pupils.-S. G. Dulsky.

(See also abstracts 2964, 3226)

EDUCATIONAL MEASUREMENT

3406. Hartung, Arthur W. (U. Tennessee Jr. Coll., Martin.) The case of GED student. Sch. & Soc., 1948, 68, 137-138.—During the year 1946-47, the student body was divided into 4 groups, women students, nonveterans, veterans, and GED veterans (of which there were 53). "Grades, total honor points, honor-points averages, and hours enrolled were analyzed for individual quarters and for the entire academic year. There was no significant difference between the members of the GED group and other veterans in courses of study, age, length of military service, military experiences, background or intelligence. The great gulf lay in academic performance." Honor point averages (on a scale of 4 pts. for A, etc.) for the 4 groups were found to be for GED students 1.37; veterans, 2.13; nonveteran men, 2.01; and women 2.29. "... local experiences would indicate . . . that ordinarily a GED test score has not proved to be a satisfactory substitute for high-school work."—R. S. Waldrop.

3407. Remmers, H. H. (Purdue U., Lafayette, Ind.), Elliott, D. N., & Gage, N. L. Curricular differences in predicting scholastic achievement: applications to counseling. J. educ. Psychol., 1949, 40, 385-394.—An analysis of scores made by 1981 freshman on the ACE, the Purdue Placement Test in English, the Purdue Mathematics Training Test, and the Purdue Physical Science Test showed that correlations of grade point averages were higher with the latter three, than with the ACE and its partial scores. Correlations between test scores and

grade point averages differed for groups of students enrolled in different curricula. Since the relationships empirically found were not always those which a priori speculation might suggest, those who give advice or guidance to students should be informed of the actual significance of such test scores.—E. B.

3408. Ross, Sherman, & Horner, Barbara. (Bucknell U., Lewisburg, Pa.) Still more on "the physique-temperament correlation." J. Hered., 1949, 40, 265.—Data are presented to offset the suggestion in a previous study by Oloufa and Bogart of a trend towards a relationship between hair color and college grades. Average grades for first semester of college freshmen showed no statistically significant differences among hair color groups, although they did reveal sex differences, except for the blonde group.—G. C. Schwesinger.

3409. Stalnaker, John M. (Stanford U. Calif.) Results of Pepsi-Cola finalists on the College Board Test. Sch. & Soc., 1948, 68, 110-111.—A report on results of 795 high school seniors on the Scholastic Aptitude Test, Program I of the College Entrance Examination Board. The nature of the awards and the types of awards are described. The scores The scores achieved on the verbal and mathematical sections are tabulated according to the type of award or those receiving no award. On both sections 118 out of 130 winners scored above the 84th percentile. These scores indicate a very promising group of students and the fact that they are elected by their classmates indicates "they should have superior personalities and the ability to gain the respect of their contemporaries."—R. S. Waldrop.

3410. Stuit, Dewey B. [Chm.] (State U. Iowa, Iowa City.), Dickson, Gwendolen S., Jordan, Thomas F., & Schloerb, Lester. Predicting success in professional schools. Washington, D. C.: American Council on Education, 1949. xii, 187 p.—Prediction problems and techniques are described in considerable detail. Summaries are presented for numerous studies predicting success in engineering, law, medicine, music, agriculture, teacher training, and nursing. The criteria of success are grades in school. The limitations of predictive indexes, cutting scores, needed research, and the role of prediction in counseling are discussed. Various intelligence, scholastic aptitude, special aptitude, interest and personality tests were used. A battery of recommended tests along with the implications for counseling are given for each of the fields studied. Several tables and extensive bibliographies are included.—G. C. Carter.

EDUCATIONAL STAFF PERSONNEL

3411. Seclet-Riou, F. La préparation psychologique des éducateurs. (Psychological preparation of educators.) Enfance, 1948, 1, 222-231.—It is stressed that teachers in France at all levels of education but particularly parents and elementary school teachers should receive systematic training in psychology, especially child psychology.—F. C. Sumner.

3412. Stendler, Celia Burns. (U. Illinois, Urbana.) How well do elementary-school teachers understand child behavior? J. educ. Psychol., 1949, 40, 489-498.—A free-response questionnaire of 25 items was given to elementary school teachers and the replies evaluated against those of three mental hygienists. The types of solutions proposed for specific behavior problems were classified, and percentages computed for each category. "Talking to the child or moralizing" was found to be a favorite treatment. Too few teachers appreciated the need to discover deeper causes which might lie behind the manifest behavior. The author believes that the questionnaire used in this study may be used as an indicator of a teacher's insight into child behavior.—
E. B. Mallory.

PERSONNEL PSYCHOLOGY

3413. Belcher, David W. (U. Minnesota, Minneapolis.) The place of the wage survey. Personnel, 1949, 26, 192-200.—The wage survey, which is one of the most important elements in wage determination today, depends for its accuracy upon the correct solving of such problems as misleading job titles, differing methods of compensation, choice of representative jobs, and proper consideration of fringe issues. A step-by-step outline of suggested survey procedure is given.—L. N. Mendes.

3414. Calhoon, Richard P. (U. N. Carolina, Chapel Hill.) Problems in personnel administration. New York: Harper, 1949. xii, 540 p. \$4.00.—Major aspects of personnel work are surveyed and evaluated with stress on application as well as enumeration of devices and techniques, to give "the feel of actual problems." Topics include the place of the personnel department, qualifications of its staff, development and inauguration of a program, interviewing, selection, placement, training, job evaluation and remuneration, work load, safety, public relations, job status, grievances, and records. 4 sections deal with management-union relations. Each chapter is followed by relevant problems for discussion, practice projects, and role-playing demonstrations.—R. Tyson.

3415. Clarke, A. C., & Cook, P. H. (Dep't of Labour & Nat'l Service, Melbourne, Australia.) A group study of women workers. Bull. industr. Psychol. Personnel Pract., Melbourne, 1948, 5(1), 29-38.—A study was made of 1870 women war workers in an Australian explosives factory. A number of variables are discussed including intelligence, age, marital status, absenteeism, and turnover.—C. G. Browne.

3416. Dooher, M. Joseph, & Marquis, Vivienne. [Eds.] The supervisor's management guide; for all who supervise others. New York: American Management Association, 1949. 190 p. \$3.50.—The volume is a compilation of articles published by A.M.A. during the past few years and judged to be the best of such publications dealing with human relations. 17 authors are represented. Included is a

self analysis quiz, an industrial relations check list for supervisors and executives, and a personal inventory designed to indicate the degree of good supervision of an individual. The final article is "A Human Relations Reading List" composed of 44 annotated references grouped under 11 interest headings.—J. W. Hancock.

3417. Gardner, Burleigh B. (U. Chicago, Ill.) Conserving and developing our human resources. Amer. Mgmt Ass. Personnel Ser., 1949, 127, 9-14.— In our big industrial organizations the over-development of central authority, the long chain of command, and extreme specialization present artificial barriers to individual progress and personality development of many workers, even of those in engineering and research groups. Some organizations have demonstrated that this problem can be solved.—L. N. Mendes.

3418. Kornhauser, Arthur. The contribution of psychology to industrial relations research. In Derber, M., Proceedings . . . I.R.R.A., (see 24: 3438), 172-188.—7 areas in which psychologists have made contributions are discussed briefly and suggestions are made as to possible problems which might be attacked, having special significance to industrial relations. These areas are: (1) matching men and jobs, (2) methods and conditions of work, (3) attitude studies, (4) clinical studies, (5) group dynamics, (6) employer-employee communications, and (7) public opinion. Among bodies of psychological theory, motivation and personality are offered as being most relevant. In order to understand behavior, it is emphasized that the large social context within which the behavior takes place must be studied.—W. H. Osterberg.

3419. Lundberg, Donald E. Personnel management in hotels and restaurants. Minneapolis: Burgess Publishing Co., 1949. iv, 246 p. \$4.25.— This book discusses the common personnel methods and group employee relations in the hotel field. Topics dealt with include job analysis and evaluation, selection and placement, executive training, merit rating, employee morale, publications, safety, and personnel organization. All discussions are related directly to hotel problems, and many illustrations are used in the presentation of methods. An appendix describes associations in the hotel field.— W. H. Osterberg.

3420. Rice, James O. Is personnel a "professional" occupation? Personnel J., 1950, 28, 284-289.—Professionalization of personnel workers is considered desirable in so far as it means better qualified executives, but undesirable in so far as it means rigid educational qualifications and lack of concern for the prosperity of the business enterprise.—M. B. Mitchell.

3421. van Delden, E. H. (Libbey-Owens-Ford Glass Co., Toledo, O.) Toward a new personnel philosophy. Personnel, 1949, 26, 173-181.—A dynamic personnel philosophy based on the individual adjustment of the worker to his total work environment is needed to complement the growing

emphasis on group approach techniques.—L. N. Mendes.

3422. Warner, W. Lloyd. (U. Chicago, Ill.) Individual opportunity—a challenge to the free enterprise system. Amer. Mgmt Ass. Personnel Ser., 1949, 127, 3-9.—Present-day blocking of the 2 basic routes of social mobility—occupation and education—is causing an increasing loss of faith in free enterprise on the part of workers. American industry must meet this challenge by providing equality of opportunity.—L. N. Mendes.

(See also abstracts 3127, 3128, 3131, 3140)

SELECTION & PLACEMENT

3423. Ballou, A. A. [Chm.], Haverin, C. B., McKenny, J. S., & King, B. H. Recruitment, selection, and indoctrination of female clerical employees. New York: Office Executives Association of New York, Inc., 1949. (Personnel & Training Ser., Res. Project Rep. No. 4.) 36 p. \$2.00.—To provide members of the National Office Management Association with up-to-date comparative data concerning current trends or practices in the New York area with respect to recruiting, selection, and indoctrination practices affecting female clerical employees, the committee of the Research Group on Personnel and Training compiled this report. 354 companies were surveyed, and 96 replies were received. A general analysis of trends and practices is presented, representative of both large and small companies in widely differing lines of business.—
M. Siegel.

3424. Clark, Jerry H. (Santa Barbara Coll., Calif.) Additional applications of the Altus Thirty-six Point Adjustment Test as a screening instrument. J. gen. Psychol., 1949, 40, 261-265.—Prospective guards of military prisons took the 36-item Altus adjustment test. Those having high maladjustment scores were then screened by a psychiatrist for fitness. The total test and a sub-test of 12 items designed to test for hysteria segregated the fit from the unfit with marked efficiency. It is suggested that the short form test is useful in screening persons before longer test programs are ad-

ministered.—B. R. Bugelski.

3425. Feronte, Nicholas C. (Marquette U., Milwaukee, Wis.) Tests used by United States air carriers. J. appl. Psychol., 1949, 33, 445-448.—24 air carrier companies were asked to indicate the psychological test which they used in selecting and promoting personnel. The standardized and self-developed tests used and the frequency of use are given as well as the types of employees for whom they were used. All but 6 of the companies were using tests, and no company had discontinued administering them permanently once it had begun to use them.—C. G. Browne.

3426. Glanz, Edward. (Teachers Coll., Columbia U., New York.) A trade test for power sewing machine operators. J. appl. Psychol., 1949, 33, 436-441.—A trade test for power sewing machine

operators consisting of 4 work samples was devised. Test scores correlated .64 with supervisors' ratings, .53 with production records, and .67 with combined criteria.—C. G. Browne.

3427. Henry, William E. (U. Chicago, Ill.) Identifying the potentially successful executive. Amer. Mgmt Ass. Personnel Ser., 1949, 127, 14-20.— A large percentage of failures among highly paid executives is due to inadequacy of personality development rather than to breakdowns of skill. The use of modern techniques of personality analysis in the selection of executive personnel is advocated.— L. N. Mendes.

3428. Jaspen, Nathan. (Pennsylvania State Coll., State College.) A factor study of worker characteristics. J. appl. Psychol., 1949, 33, 449-459.—Using 275 occupations, 20 of the 45 items on the Worker Characteristics Form were found to be significantly present in more than 10% of the occupations. Factor analysis using Thurstone's centroid method and Thurstone's method of extended vectors reduced the 20 characteristics to the following 6: strength intelligence, inspection, physically unpleasant working conditions, manual dexterity, and mechanical information. 16 references.—C. G. Browne.

3429. Kerr, Willard A. (Illinois Institute of Technology, Chicago.), & Martin, H. L. Prediction of job success from the application blank. J. appl. Psychol., 1949, 33, 442-444.—Using 244 employees of an RCA plant, tetrachoric coefficients of correlation between job success (as measured by merit ratings) and 20 items in the application blank are given. When the original applications were scored check-list fashion with a validated key, the check-list raw scores correlated .35 with job success. Approximately 10% of job success was accounted for by autobiographical factors reported in the employment application blank.—C. G. Browne.

3430. Richardson, Marion W. (Richardson, Bellows, Henry & Co., New York.) Forced-choice performance reports; a modern merit-rating method. Personnel, 1949, 26, 205-212.—The main weaknesses of conventional merit rating systems are largely overcome by forced-choice technique, which achieves a high degree of objectiveness by calling for description rather than for direct evaluation. An outline of the forced-choice method includes sample directions and 7 sample blocks from a 5-statement 30-block scale.—L. N. Mendes.

3431. Steele, John E. (Indiana U., Bloomington.) Tests used in recruiting and selecting college graduates. Personnel, 1949, 26, 200-204.—According to a survey made by Indiana University there is little agreement among employers as to what type of employment tests should be administered to college graduates. Of 168 firms less than 50% actually gave tests to college graduates. 74 firms that used tests reported the use of more than 90 different kinds. The types of tests most frequently in use were based on Wonderlic Personnel, Kuder Preference, and Bernreuter Personality.—L. N. Mendes.

3432. Strong, Edward K., Jr. (Stanford U., Calif.) Vocational interests of accountants. J. appl. Psychol., 1949, 33, 474-481.—The author discusses the Strong Vocational Interest Blank scales for office worker, accountant, senior CPA and partner CPA. The new senior CPA scale is based on the interests of 611 senior CPA's and has a reliability of .89.—C. G. Browne.

3433. Viteles, Morris S. (U. Pennsylvania, Philadelphia.) Selection and placement of employees. In Kornhauser, A., Psychology of labormanagement relations, (see 24: 3445), 9-21.—It must be recognized that productive efficiency of employees is necessary to the welfare of the employees, the unions, and society at large, as well as management. Where productive efficiency is low labor relations cannot be maintained on a high level; and if selection and placement methods are inadequate, efficiency is likely to suffer. The status of testing today is, however, not far different from 20 years ago. Tests are published and promoted with inadequate validation data, and satisfactory criteria are seldom developed. Contributions might be made by applying testing programs from the point of view of vocational guidance rather than employee selection, with the twin goals of increasing proficiency and increasing enjoyment at work.—W. H. Osterberg.

(See also abstract 3473)

LABOR-MANAGEMENT RELATIONS

3434. Anonymous. Grievances and the new supervisor. Personnel J., 1949, 28, 248-253.—Some practical hints are given to help new supervisors handle grievances. They are encouraged to settle all points within their jurisdiction promptly and unemotionally, and to immediately refer matters outside their jurisdiction to the proper authorities for disposition.—M. B. Mitchell.

3435. Busch, Henry M. Conference methods in industry. New York: Harper, 1949. x, 107 p. \$1.50. -Brief discussions of the applications of conference methods in industry and the bases of conference theory are followed by several chapters giving specific points to be followed in different situations. These include what to do in planning and conducting a conference, and tips to chairmen on how to conduct themselves and avoid or deal with problems developing. The value of the conference method is applied to industrial education and the problem of communication and industrial morale, as well as to general discussion and policy making. In a chapter on adjustment of conflicts, grievance procedures and problems are discussed and an arbitration case is used to illustrate the method proposed in such situations. One chapter is devoted to the planning and procedure of panel discussions, and the final chapter discusses social implications of the group process and its relationship to democracy, leadership, and social progress.-W. H. Osterberg.

3436. Clarke, A. C. (Dep't of Labour & Nat'l Service, Melbourne, Australia.) Australian house maga-

zines. Bull. industr. Psychol. Personnel Pract., Melbourne, 1948, 5(1), 10-20.—The contents of 83 Australian house magazines distributed by industries varying in size from 100 to 27,000 employees were analyzed. A table of the percentage of space given to each of 16 topics is included, company policy and practices and off-plant personal items receiving the most space (average of 17.7% and 18.5%, respectively). Another more general breakdown revealed that communications from management used 27.2% of the space; information on employee personal matters, 42.7%; general material unrelated to the plant, 26.4%; and advertising, 3.7%.—C. G. Browne.

3437. Delson, Eugene A., & Burns, William J. (Associated Business Consultants, Chicago, Ill.) Personnel J., 1950, 28, 296-298.—Before an incentive plan is installed, it should be carefully explained to the workers. They must understand what it will mean to them in take-home pay, and how it will be computed, in order for it to be a real incentive for them to cooperate under the new plan.—M. B. Mitchell.

3438. Derber, Milton [Ed.] Proceedings of first annual meeting. Industrial Relations Research Association, Cleveland, Ohio, December 29-30, 1948. Champaign, Ill.: Industrial Relations Research Assoc., 1949. ix, 255 p. \$2.50.—The papers presented are grouped under 5 categories, concerned primarily with labor economics and labor law. Papers of psychological interest by Arthur Kornhauser (24: 3418) and C. Wright Mills (24: 3452) are abstracted as indicated. The constitution, business reports, and a brief history of the Association are included.—W. H. Osterberg.

3439. Evans, James W. (Illinois Institute of Technology, Chicago.) Emotional bias in merit rating. Personnel J., 1950, 28, 290-291.—The validity of merit ratings may be reduced when raters are emotionally biased. The bias may have several causes. The raters may feel inadequate to make the appraisals required, they may doubt the fairness and accuracy of the method, or they may fear what will happen to themselves or the people they rate. The bias can be eliminated or prevented if all supervisors are given an opportunity to help devise the rating system and are given an adequate training course in its use.—M. B. Mitchell.

3440. French, John R. P., Jr., & Zander, Alvin. (U. Michigan, Ann Arbor.) The group dynamics approach. In Kornhauser, A., Psychology of labormanagement relations, (see 24: 3445), 71-80.—Two studies are reported. One is concerned with the effect on production of 3 methods used by management in instituting a change among factory groups. The findings were that subsequent morale and efficiency were functions of the amount of participation permitted the employees by management. The other study investigated the relationship between the popularity of individuals and their conformity to behavior standards set by the group. With popularity being determined by a sociometric questionnaire, and the group standard being one of production

level, correlations are reported of -.67, in an office before transfers, and -.85, in the same group after transfers.—W. H. Osterberg.

3441. Giese, William James, & Ruter, H. W. An objective analysis of morale. J. appl. Psychol., 1949, 33, 421-427.—Departmental scores on a morale questionnaire were correlated with 6 objective factors of departmental operations, yielding a multiple correlation between morale and the 6 factors of .71. The objective morale index used is also a measure of supervisory effectiveness and may be used to supplement or replace supervisory merit rating.—C. G. Browne.

3442. Haggard, Ernest A. (U. Chicago, Ill.) Social and psychological factors in work adjustment. Amer. Mgmt Ass. Personnel Ser., 1949, 127, 20-26.—
If our industrial organizations are to function harmoniously, it is necessary that the run-of-the-mill workers find basic emotional satisfactions in their work. Personality factors should be considered at every placement and reassignment level.—L. N. Mendes.

3443. Holdrege, Fred E., Jr., (Air Materiel Command, Dayton, O.) Implementing an employee opinion survey. J. appl. Psychol., 1949, 33, 428-435.—80,000 civil service workers at 8 Air Materiel Command bases were given a questionnaire consisting of 146 items and divided into 8 parts covering various aspects of the work conditions. The article reproduces the instructions, descriptions, and suggestions sent to each commanding officer when the results of the survey were returned to him. Results, however, are not given.—C. G. Browne.

3444. Katz, Daniel. (U. Michigan, Ann Arbor.) The attitude survey approach. In Kornhauser, A., Psychology of labor-management relations, (see 24: 3445), 63-70.—Survey procedures in industry have been very limited in scope in that they have not thoroughly explored the significant material concerning the individuals in a particular plant, and also in that they have ignored other group structures and interrelationships which are part of the larger labor-management picture. New directions which surveys should take are discussed. A study conducted by the Surveys were made: of production workers, foremen, and stewards. One finding was that favorable attitudes of employees toward the company were related to the practice of consultative supervision by the foremen.—W. H. Osterberg.

3445. Kornhauser, Arthur. [Ed.] (Wayne U., Detroit, Mich.) Psychology of labor-management relations. Champaign, Ill.: Industrial Relations Research Assoc., 1949. (Publ. No. 3.) vi, 122 p. \$1.50.—The 7 papers presented at the meeting held in Denver, September 7, 1949, under the joint sponsorship of the Industrial Relations Research Association, the Division of Industrial and Business Psychology of the American Psychological Association, and the Society for the Psychological Study of Social Issues are abstracted individually in this

issue. See entries no. 3433, 3440, 3444, 3447, 3449, 3450, 3455.—W. H. Osterberg.

3446. Lindahl, Lawrence G. (Todd Co., Rochester, N. Y.) Discipline 100 years ago. Personnel J., 1949, 28, 245-247.—One hundred years ago turnover was greater than now probably due to the pranks of youngsters who would now be required to attend school. By and large, however, the same personality weaknesses still call forth disciplinary action from personnel directors.—M. B. Mitchell.

3447. McGregor, Douglas. (Antioch Coll., Yellow Springs, O.) Toward a theory of organized human effort in industry. In Kornhauser, A., Psychology of labor-management relations, (see 24: 3445), 111-122. -The framework within which a theory of organized human effort is considered is that of the freeenterprise system. The cornerstone of such a theory is "All human behavior is directed toward the satisfaction of needs," the term "need" referring to tension-states the manifestations of which are observable in behavior. For the manager of an enterprise this leads to the necessity for creating certain conditions-confidence, personal need satisfaction, participation, etc.—for workers if he is to be successful in his managerial task. Merit rating as a basis for individual wage determination is considered critically, and it is proposed that if financial rewards above the base rate are to be made, they should be determined according to the efficiency of the whole organization, and be paid as a percentage-equal for all employees—of base wages.—W. H. Osterberg.

3448. McKeand, Chas. A., & Van Nostrand, Randolph. (Merchants & Manufacturers Ass., Los Angeles, Calif.) Employee information from A to Z. Personnel J., 1949, 28, 254-261.—Employees should be given complete information about the company so that they can feel they are a partner of management without feeling a need to take over management's responsibilities.—M. B. Mitchell.

3449. McMurry, Robert N. The clinical psychology approach. In Kornhauser, A., Psychology of labor-management relations, (see 24: 3445), 81-93.

The importance of emotions in labor-management relations suggests a need for clinical research and the application of clinical techniques. Clinical psychology can contribute to labor relations at the worker level through exit interviews, opinion polls, etc. However, the key to conditions in a plant is often found in the personality make-up of the dominant individual or group in top management and unions, and it is here that the clinician can contribute most to an understanding of trouble sources in labor-management relations.—W. H. Osterberg.

labor-management relations.—W. H. Osterberg.

3450. Maier, Norman R. F. (U. Michigan, Ann Arbor.) Improving supervision through training. In Kornhauser, A., Psychology of labor-management relations, (see 24: 3445), 27-42.—Concepts and techniques in training supervisors in democratic leadership are discussed, and data are presented from a specific study on group problem-solving. The basic feature of democratic leadership is a shift of responsibility for decisions from the leader to the

group. A skillful leader is one who can conduct a problem-solving conference to the goal of unanimous agreement. Principles of conference are discussed, as are the skill requirements of a successful demo-cratic leader.—W. H. Osterberg.

3451. Mandell, Milton M. (U. S. Civil Service Commission, Washington, D. C.) Supervisors' attitudes and job performance. Personnel, 1949, 26, 182-183.—Attitudes toward people, which have proved the distinguishing factor in superior job performance at supervisory levels, are subjected to a methodized appraisal.—L. N. Mendes.

3452. Mills, C. Wright. The contribution of sociology to studies of industrial relations. In Derber, M., Proceedings . . . I.R.R.A. (see 24: 3438), 199-222.—"Industrial sociology, or . . . human relations in industry" is considered as a new area in the field of sociology. Particular focus is here placed upon "the so-called Mayo school . . . from which other tendencies now arise." The points of view of managers, professors, and unionists, with reference to this area of research are discussed. The promise of sociology is seen as a blending of the work of the 19th century theorists with the precision and analytic power of methods developed recently. For industrial sociology, it is concerned with a study of worker morale and the power structure in the society .- W. H. Osterberg.

3453. Osterberg, Wesley. (U. Illinois, Urbana.) Training which modified foremen's behavior. Personnel J., 1949, 28, 239-244.—Before foremen training could be effective, the negative attitudes, resistances and doubts of the foremen had to be discovered and cleared. In a series of training conferences for pipeline foremen of an oil company, it was learned that role-playing could not be used effectively until the negative attitudes were overcome. The men willingly participated in role play-ing, taking tests and making recordings when they understood their purpose and the men were assured the materials were to become the property of the psychologist and not of the company.-M. B.

3454. Selzer, Sidney. Studying job satisfaction among hospital attendants. Publ. Personnel Rev., 1950, 11, 26-29.—Description of a job satisfaction survey among 279 civil service hospital attendants. The most important factor for job satisfaction was job security; good wages was second. Other factors sampled, and ranking lower, were interesting work, promotional opportunities, good supervision, working conditions, and good working companions. The data were analyzed by sex and supervisory or nonsupervisory status. The method of tabulating data on a specially devised "Keysort" type of card, and the questionnaire itself are described in this article.— H. F. Rothe.

3455. Tiffin, Joseph. (Purdue U., Lafayette, Ind.) The joint committee in job evaluation. In Kornhauser, A., Psychology of labor-management relations, (see 24: 3445), 23-25.—To promote understanding and smooth administration of a job evaluation

system, a continuous management-union job evaluation committee is recommended. Advantages are: greater likelihood of union membership and leadership to understand the purpose of job evaluation, individual job rates do not become subjects of formal grievances, re-evaluation of jobs that have changed is made more practicable, and the job descriptions written by such a committee provide a more solid foundation on which a program rests than is otherwise obtainable. - W. H. Osterberg.

3456. Weschler, Irving R. (U. California, Los Angeles.) Who should be a labor mediator? Personnel, 1949, 26, 222-227.—Responses of 82 active labor mediators to a questionnaire on traits of the ideal mediator are presented in statistical form in 2 tables. A tendency is shown to accent impartiality, persuasiveness, personal integrity, verbal facility, and ability to master the complexities of collective bargaining. A formal education is not considered a prerequisite to success .- L. N. Mendes.

3457. Williams, Douglas. (Fred Rudge, Inc., New York.) Do you know what your foremen are thinking? Personnel, 1949, 26, 213-221.—Attitude surveys among supervisory groups have frequently yielded unexpected and helpful results. The techniques of different foreman survey methods-interview, questionnaire, and a combination of the twoare analyzed.-L. N. Mendes.

INDUSTRIAL AND OTHER APPLICATIONS

INDUSTRY

3458. Brock, L. Wayne. (338 N. Main St., Greenville, S. C.) Industrial vision procedures. Optom. Wkly, 1949, 40, 1856-1858.—The author summarizes the duties of the sight specialist who carries out an industrial vision program.-D. Shaad.

3459. [Brown, Fred R.] A study of the legibility of trans-illuminated markings in aircraft cockpits. Philadelphia, Pa.: Aeronautical Medical Equipment Laboratory, Naval Air Experimental Station, Naval Air Material Center, 1949. 33 p. (Report TED No. NHM EL 600 Part 2.)—In an attempt to determine the principles governing the legibility of red trans-illuminated Grow Chart letters under conditions simulating those encountered in reading markings on new type aircraft cockpit console panels, 75 subjects read the letters from a distance of 28 inches in the dark under conditions of dark adaptation. The variables were letter size, brightness of trans-illumination and level of background floodlighting. In the range employed, legibility, as measured by reading error scores, improves with increasing size and brightness of trans-illumination.

—M. W. Raben.

3460. [Brown, Fred R.] Survey of lighting preferences of a group of naval aviators in the XAM-2 cockpit mockup. Philadelphia, Pa.: Naval Air Materiel Center, U. S. Naval Base Station, 1948. (Rep. TED No. NAM EL 600.) 24 p.—An opinion survey of a group of naval aviators was made to determine preferences among several lighting schemes for the console and instrument panel of the XAM-2 cockpit mockup. The mockup had an indirect lighting system and a supplementary flood-lighting system. More than half the preferences were for a combination of indirect lighting with low-level floodlighting rather than indirect lighting alone for the consoles because of increased visibility of the control and indicating elements. This preference was especially desired by less experienced pilots. Indirect light was considered sufficient for the instrument panel by almost unanimous opinion.—

L. B. Seronsy.

3461. Christensen, Julien M. In-flight activities of navigators in the Atlantic and Pacific areas. Dayton, O.: U. S. Air Force, Air Materiel Command, Wright-Patterson Air Force Base, 1949. ii, 17 p. (AF Tech. Rep. No. 5771.)—"The activities of navigators of the Military Air Transport Service engaged in mid-latitude flying in the Atlantic and Pacific areas are reported. Similarities between the two areas are noted. It is concluded that an inordinate amount of time is devoted to paper work in both areas, and that effort aimed at reducing this amount by development of computers, elimination of unnecessary recordings, and streamlining of work forms would be well rewarded. It is suggested that pilots . . . be trained in elementary dead reckoning navigation and Loran so that one of them may relieve the navigator on extended missions."—M. W. Raben.

3462. Hay, Edward N. Job evaluation—a discussion. Personnel J., 1949, 28, 262-266.—Most commercial and industrial organizations use either a Point method or Factor Comparison method of job evaluation. The author suggests research projects and invites others to contribute their experience in job evaluation to the Personnel Journal.—M. B. Mitchell.

3463. [Maucorps, P. H.] Tabagisme et travail. (Nicotinism and work.) Travail et Méthodes, 1949, No. 19, 38-39.—The studies of Hull, McFarland, Edwards, Malméjac and others are summarized. It is emphasized that in those studies only certain factors of effect of tobacco are observed, and that the study of other factors would change the picture

very much.-E. Kats.

3464. Missenard, A. L'influence des conditions thermiques ambiantes sur la capacité de travail des ouvriers, leur morbidité, leur mortalité, et la fréquence des accidents. (The influence of thermal surrounding conditions on the capacity for work, sickness, mortality and frequency of accidents of workers.) Travail et Méthodes, 1949, No. 21, 5–12.— The influences of (1) increase of temperature on capacity for work, (2) of abnormally hot or cold conditions on skill, and presence of mind, (3) of cold outside temperatures on the respiratory system, (4) exhaustion by exposure to the sun, and (5) suddenly changing temperatures are discussed.—E. Katz.

3465. Tiffin, Joseph (Purdue U., Lafayette, Ind.), Parker, B. T., & Habersat, R. W. Visual perform-

ance and accident frequency. J. appl. Psychol., 1949, 33, 499-502.—A comparison was made of the visual performances of 42 accident-prone and 42 accident-free employees on the Bausch and Lomb Ortho-Rater. In 3 visual skills—acuity worse eye (near visioa), acuity right eye (near vision) and color perception—differences exceeded the 5% level of significance. A comparison with Stumpf's similar previous study indicates that different patterns of visual skills may be required for safety on various jobs in different industries.—C. G. Browne.

3466. Walker, K. F. (Dep't of Labour & Nat'l Service, Melbourne, Australia.) Recent research on fatigue. Bull. industr. Psychol. Personnel Pract., Melbourne, 1948, 5(1), 21-28.—Evidence from recent researches suggests that under certain conditions, activity that does not involve strenuous muscular effort may be continued for very long periods without any deterioration in performance. These conditions are: that physical working conditions be good; that the task be designed so as not to set up conflict in the cycle of movements; that certain standards of performance be accepted by the worker, deviations from which are experienced as a personal failure; that the worker be continuously aware of the extent to which he is meeting the standards of performance accepted by him.—C. G. Browne.

3467. Whitlock, John B., Jr., & Crannell, Clarke W. (Miami U., Oxford, O.) An analysis of certain factors in serious accidents in a large steel plant. J. appl. Psychol., 1949, 33, 494-498.—In a steel corporation, 100 accident-prone and 200 accident-free employees were compared on a number of personal, job, and test variables. The "non-test" data, the Otis, and the Bennet-Frye did not differentiate the groups. On the Bernreuter, the accident cases appeared less neurotic, less introverted, and more self-confident to a degree justifying further

study.—C. G. Browne.

3468. [Williams, A. C.] (U. Illinois, Urbana.) Suggestions concerning desirable display characteristics for aircraft instruments. Port Washington, N. Y.: Special Devices Center, 1949. (Tech. Rep.-SDC 71-16-4.) 17 p.—The display characteristics of aircraft instruments that determine the speed and accuracy with which such displays may be interpreted and used by the pilot and other operators are analyzed in the light of present experimental data. The tasks the operator must perform are of 2 types: discriminative, and manipulative. Suggestions based on these types are offered as guides for selection of displays.—L. B. Seronsy.

3469. [Youtz, R. P., & Flanagan, John C.] Audio aids to blind flying and a scoring device for the Link Trainer. Port Washington, N. Y.: Special Devices Center, 1949. (Tech. Rep.-SDC 370-2-1.) iii, 30 p.—"Flybar" is a system designed to give pilots nonverbal auditory indications of turn, bank and pitch during flight. Methods and procedures for evaluating "flybar" in a Link trainer are described. The circuits of the measures developed—average angular deviation, maximum deviation, and reaction time—

are described and calibration data given. Subjective evaluation of the control of the trainer indicates that "flybar" control is practicable, though not so precise as with visual signals.—L. B. Seronsy.

(See also abstract 3041)

BUSINESS & COMMERCE

3470. Eimicke, Victor W. (City Coll. of New York.) Kuder Preference Record norms for sales trainees; with detailed description and additional psychological test results. Occupations, 1949, 28, 5-10.—Norms are presented for the Kuder Preference Record, Modified Alpha, George Washington Social Intelligence Test, and Bernreuter Personality Inventory, based on 500 male sales trainees.—G. S. Sheer.

3471. Hewer, Vivian H., & Keating, Elizabeth A. (U. Minnesota, Minneapolis.) Do firms hire college drop-outs as salesmen? Occupations, 1949, 28, 32-34.—Based on a personal survey of 98 firms employing 50 or more persons, it is concluded that some college training is helpful, but a degree is not essential nor necessarily preferred, for salesmen. Dropping college as a result of personality deficiencies is undesirable, but poor grades alone do not hinder employment in sales.—G. S. Speer.

3472. Lilley, Charles J. A new method of classifying investigator positions. Publ. Personnel Rev., 1950, 11, 21-25.—Many existing definitions of duties and qualifications for positions as "investigator" led to this attempt to clarify that classification. The final result consisted of two general classes, (1) prevention type investigators, and (2) detection type investigators. This provides a better basis for classifying, paying, recruiting, and testing for investigators.—H. F. Rothe.

3473. Shaffer, Robert H. (Indiana U., Bloomington.) Kuder interest patterns of university business school seniors. J. appl. Psychol., 1949, 33, 489-493.—The Kuder Preference Record was administered to 975 men and 205 women students in the Indiana University School of Business. The differences between the scores of students majoring in the various business curricula are discussed. In practically every case the interest patterns for the various curricular groups followed those set up for related occupations by the test manual.—C. G. Browne.

PROFESSIONS

3474. Babcock, Charlotte G. (U. Chicago, Ill.) Emotional needs of nursing students. Amer. J. Nurs., 1949, 49, 166-169.—The emotional needs of nursing students are those of all late adolescent girls: need for outlet of tremendous energy drive; the desire to be independent; desire for popularity; strong need to depend on others for help against which they defend themselves by more forcibly asserting their independence; great concern with appearance and with body development; unsatisfied curiosity; craving for prestige. Suggestions are given for meeting these emotional needs of the student nurse.—F. C. Sumner.

3475. Dewar, Lindsay. Psychology and the parish priest. London: A. R. Mowbray, 1949. 122 p. \$1.75.—In brief outline the author speaks to pastors on the psychological aspects of church work. He makes practical suggestions on preaching and the conduct of divine worship, parish work, dealing with individuals, and special problems arising in marriage and homosexuality. References.—P. E. Johnson.

3476. Ellis, Albert, & Fuller, Barl W. (New Jersey State Hosp., Greystone Park.) The personal problems of senior nursing students. Amer. J. Psychiat., 1949, 106, 212-215.—An analysis of 572 nonmarital and nonsexual questions, anonymously asked by senior nursing students of a psychiatrist, revealed that 68% seemed to be concerned with the subject's personal problems. Only 32% were seemingly objective in character. The study tended to reveal that the nurses studied were lacking in their knowledge of basic mental hygiene principles. Increased attention to the study of mental hygiene in nursing schools is recommended by the authors.—R. D. Weitz.

3477. Garber, W. F. Evaluation of psychometric tests for optometry. Optom. Wkly, 1949, 40, 1927–1932; 1942–1943.—A statistical study of aptitude tests used for a group of optometric students is presented.—D. Shaad.

3478. White, Robert C. Sociological factors in strategic intelligence. Milii. Rev., Ft Leavenworth, 1949, 29, 41-45.—Strategic intelligence in the military sense is based upon a knowledge of the sociological conduct of groups of human beings. Particularly important for military purposes is an understanding of sociological elements in public welfare, public opinion, labor problems, and population and manpower. The goals of a country relative to health, well-being, social status and education are important in appraising the strategic situation within the country. A thorough knowledge of the national psychology toward its own people and toward other nations is vital to the proper appraisal of the public reaction.—M. A. Seidenfeld.

(See also abstracts 3189, 3410)

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1937	11	-	2	-	-	-	-	-	-	-	-	_	_	_	\$.75	\$.75
1938	12	-	-	-	-	-	-	-	8	9	10	11	12	13	\$.75	\$4.50
1939	13	-	-	-	-	-	-	-	_	-	_	_	_	13	\$.75	\$.75
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1943	17	1	2	3	4	5	6	7	8	9	10	11	12	13	\$.75	\$7.00
1944	18	1	2	3	4	5	6	7	8	9	10	11	12	13	\$.75	\$7.00
1945	19	1	2	3	4	5	6	7	8	9	10	11	12	13	\$.75	\$7.00
1946	20	1	2	3	4	5	6	7	8	9	10	11	12	13	\$.75	\$7.00
1947	21	1	2	3	4	5	6	7	8	9	10	11	12	13	\$.75	\$7.00
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